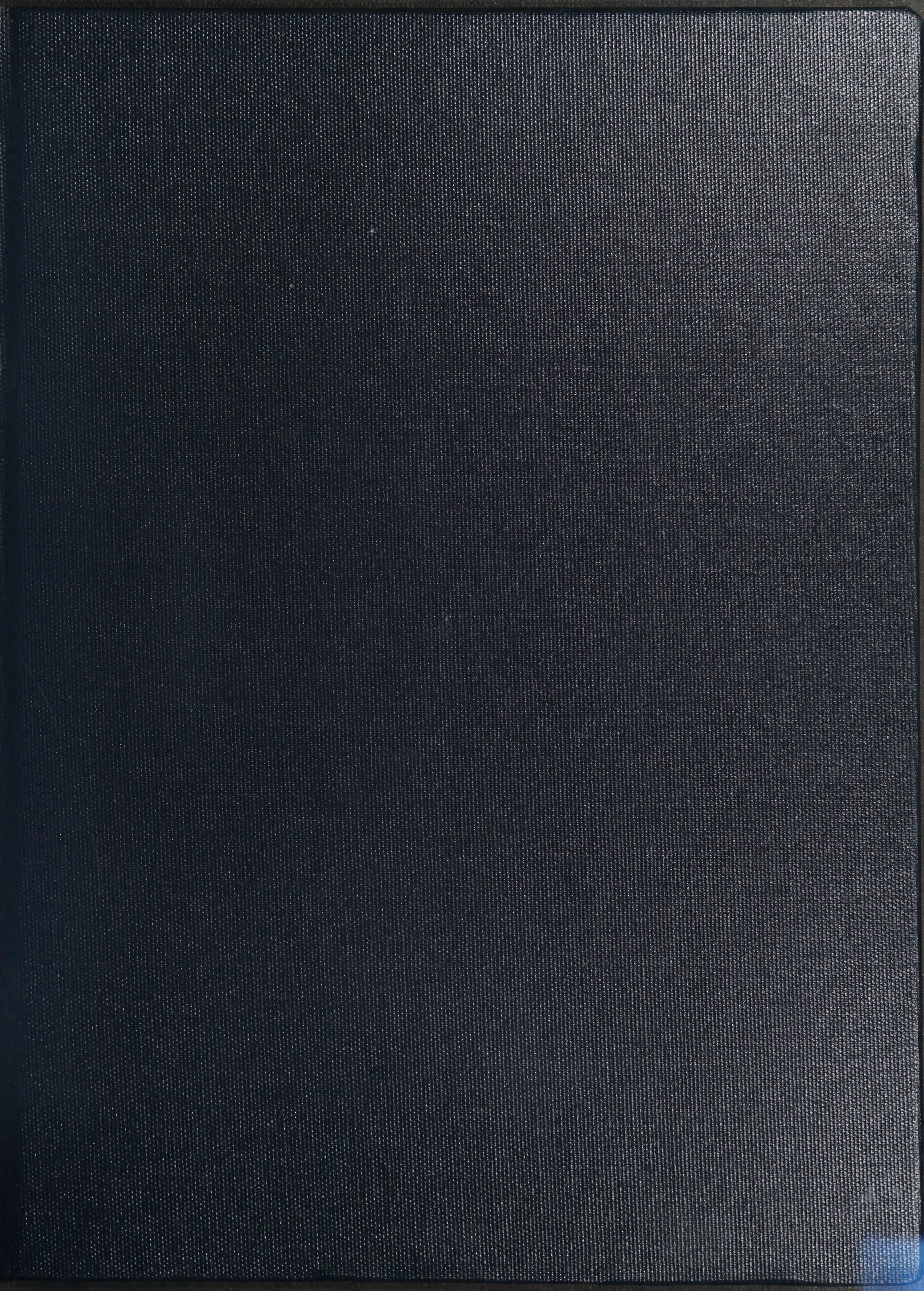


UNIVERSITY OF
ILLINOIS LIBRARY
AT URBANA CHAMPAIGN
OAK STREET
LIBRARY FACILITY

040113C 67

66678000 4808

UNIV OF ILLINOIS - URB/CHA
LIBRARY BINDING DIVISION
1408 W GREGORY DR
URBANA, IL 61801

OAK (EDX) 1

A23340000

V OAK (EDX)

custom per...

29 A R M Y

10 62
9 2012
6 355.05
UNC
2 UIUC LIB

1

598 032613

WHI libr

0-0/16

0-0/16 0p

Education Periodicals DAK
355.05 UNC
v. 62, no. 1 (2012) PERIODICAL

Association of the United States Army

ARMY

January 2012 www.ausa.org $3.00

**********AUTO**ALL FOR ADC 604
116399 20120531 20120101
ACQUISITIONS DEPT.C02333592 0001
ACQUISITIONS DEPT.C02333592 003546
12 LIB UNIV OF IL S000258
1408 W GREGORY DR 01:053367
URBANA IL 61801-3607

EXTRAORDINARY.

AND ONLY CHINOOK.

MISSION:
TRANSPORT

LOCATION:
AFGHANISTAN

The CH-47F Chinook is the most versatile, mission-capable heavy-lift helicopter in the world. More powerful than ever with advanced flight controls and avionics, the CH-47F is in a class by itself, whether it's transporting troops and equipment, on deep combat assault, performing search and rescue, or delivering disaster relief. Extraordinary performance—it's what you expect from Chinook.

BOEING

ARMY MAGAZINE

United We Stand

VOL. 62, NO. 1 | January 2012

PUBLISHED BY THE ASSOCIATION OF THE U.S. ARMY

FRONT & CENTER

The Combat Soldiers' Dilemma *By GEN Frederick J. Kroesen, USA Ret.* ***Page 13***

A Closer Look at the 'Build Partner Capacity' Mission *By LTG James M. Dubik, USA Ret.* ***Page 14***

Battling Another Army Crisis of Self-Confidence *By Richard Hart Sinnreich* ***Page 16***

Force Structure and the Army Budget *By MAJ Glenn A. Henke* ***Page 17***

'Once a Soldier . . .' Revised ***Page 19***

Airborne Operational Surveillance and Target Acquisition in a Time of Declining Budgets
By LTG Ronald L. Watts, USA Ret. ***Page 20***

Observations on Mission Command: Will Our Army Adapt?
By COL Kevin C. M. Benson, Ph.D., USA Ret., and LTG Gregory H. Penfield ***Page 22***

FEATURES

Army Aviation Update *By Scott R. Gourley*
Delivery of the AH-64D Apache Block III multi-role helicopter and the OH-58D Kiowa Warrior Wartime Replacement Aircraft exemplify Army Aviation's sustainment, performance and modernization strategies. ***Page 24***

U.S. Army UAS Programs *By Scott R. Gourley*
From the "small-end" Raven to the "expansive" RQ-7B Shadow 200, the Army continues platform investments and system planning across the UAS spectrum. ***Page 29***

MUSIC 2011 *By Scott R. Gourley*
Army Aviation interoperability and systems integration were the hallmarks of the Manned/Unmanned Systems Integration (MUSIC) exercise at Dugway Proving Ground, Utah. ***Page 32***

UAS Project Office Undergoes Network Integration Evaluation
By COL Timothy Baxter
Network Integration Evaluation 12.1 allowed the Army's Unmanned Aircraft Systems (UAS) Project Office to test new techniques and refine others that are already fielded. ***Page 38***

The Army's Next Training Model: Building on the Past as We Prepare for the Future
By LTC Chris Budihas and MAJ Kevin Broadnax
A new Full Spectrum Training Environment model first executed at Hohenfels, Germany, last fall, teaches lessons learned from the last decade of war. ***Page 42***

U.S. Army Europe Names Best Junior Officer
Top company-grade officers represented their units in the first Best Junior Officer Competition in Grafenwoehr, Germany, in November. ***Page 48***

The Sun Sets on Operation New Dawn, but the Shadows Remain *By Dennis Steele*
With the U.S. "responsible drawdown of forces" in Iraq complete, the United States Army carries home memories, lessons learned and the greatest volume of materiel since World War II. ***Page 52***

Company Command—Building Combat Ready Teams: The Five Most Relevant Leader Attributes
Stories and advice elicited from company-grade officers reflect their assessment that judgment, interpersonal tact, confidence, respect and duty are the five most valuable attributes of effective leaders. ***Page 57***

DEPARTMENTS

Advertisers in This Issue 4
Washington Report 6
News Call 7
Soldier Armed 61
Sustaining Member Profile 63
Reviews 65
Historically Speaking 69

'Build Partner Capacity' A Vital Mission for the U.S. Army

By GEN Gordon R. Sullivan, USA Ret.
President, AUSA

In the December issue of ARMY Magazine we read a fine piece by BG John Brown, U.S. Army retired, with observations on the "Commonwealth of Independent States at 20" that closed with the observation, "None of this in any way denigrates the long-term defenders of Checkpoint Charlie and Observation Point Alpha. Without their commitment and sacrifice, a happy conclusion to the Cold War would have been impossible. Great events are seldom precisely defined, however, and missions are seldom satisfactorily complete without follow-up. The Fall of the Wall required the transformation of the Soviet Union to guarantee permanence. Significant further efforts would be necessary to nurture democratic governance, the peaceful and lawful resolution of disputes, and military deference to civilian rule in the former Warsaw Pact. Partnership for Peace was a case in point with respect to such efforts. The process is not yet complete. American soldiers can be proud of their success, but they can never rest on their laurels."

As that issue was going to press, I was visiting U.S. Army Europe—a visit that included a fairly extensive set of briefings and tours of facilities at the Joint Multinational Training Command. I returned about the time the congressional "super committee" reported its failure, and the media began to fill with stories forecasting dire consequences for the Department of Defense. What I saw in Europe reassured me that our soldiers are not resting on their laurels. What I encountered in Washington convinced me that our Army will face tough battles to continue to resource the programs that build on the Partnership for Peace effort that began almost 20 years ago.

In this issue of ARMY, LTG James M. Dubik, U.S. Army retired, lays out the essential elements of those programs that are building the capacity of foreign armies to serve as defenders of democracy. His essay deserves careful reading and wide dissemination. He distinguishes between mature military forces, forces with tactical shortcomings and forces that need to be built from the ground up. Today's Army is heavily engaged in all of those activities, and that engagement must continue no matter how constrained our budget may be.

The Joint Multinational Training Command clearly has the lead in this work today. Its simulations, unit training and individual leader development programs all include representatives from armies in the first two categories, and much of the training is aimed at preparing soldiers and units for deployments into areas where they will be building armies that are in the third category. NATO allies are supplemented by soldiers from Sub-Saharan Africa, the Balkans and the old Warsaw Pact in a wide variety of training, all designed to build partner capacity.

The U.S. Army's investments that transformed Cold War training facilities in Germany into world-class venues for training to meet post-Cold War requirements have not been matched anywhere else. Germany was the right place to build these capabilities, and it is the right place to continue them. They are more accessible there than they would be anywhere else, and the existing infrastructure fosters great flexibility in the scenarios that can be portrayed and the tasks that can be trained.

But we all know that there is no member of Congress representing Grafenwoehr, and the Army is entering a period when every expense will be scrutinized and many cuts will be necessary. We restructured the Army in Europe to reflect the changed European environment 20 years ago when I was Chief of Staff, and very few realistic savings can be gleaned from the forces that remain there. We need a presence in NATO, and the most powerful parts of that presence are the ability to deploy to meet threats and the ability to help everyone's deploying forces—not just our own—be fully prepared for emerging contingencies. The Joint Multinational Training Command (JMTC) is the key to those abilities. Whatever costs are involved in this endeavor in Germany are marginal, and the impact of what is going on is enormous. It would be penny-wise and pound-foolish to eliminate these activities in Europe. We must fight to keep JMTC strong. ★

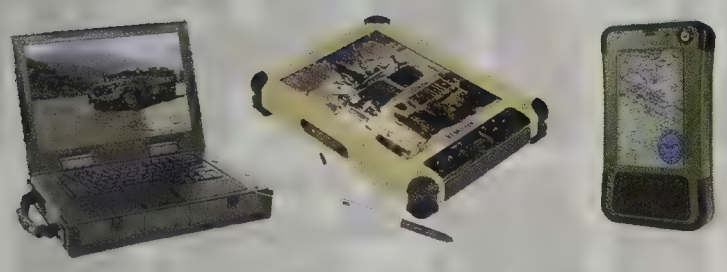
U.S. Army/SPC Gemma Iglesias

GEN Gordon R. Sullivan is greeted upon arrival in Germany by U.S. Army COL Jeffrey Martindale.

Computers · Disk Drives · Mass Storage · Printers · Network Communication Devices · Product Support for Military & Commercial Applications

TOUGHEST KID ON THE FLIGHT LINE

A Case for Rugged... As a mobile clamshell or tablet, VT Miltope's new RCLC-1 rugged convertible laptop is mission-ready in any form. The RCLC-1 is an integral part of the MSD-V3 program developed for the U.S. Army's At-Platform Automatic Test Systems (APATS) Integrated Family of Test Equipment (IFTE). Our family of HARD WEAR sets the standard for rugged military computing. Built rugged down to their core processors, our products improve warfighters' ability to perform maintenance missions in extreme environments and challenging tactical conditions. The VT Miltope Family... mission-ready in the hangar, on the flightline, or on the move. MILTOPE.COM



RUGGED RUNS IN THE FAMILY

VT Miltope

A company of VT Systems

AUSA FAX NUMBERS

(703) 236-2929
INSTITUTE OF LAND WARFARE, SENIOR FELLOWS

(703) 841-1050
EXECUTIVE OFFICE

(703) 236-2927
REGIONAL ACTIVITIES, NCO/SOLDIER PROGRAMS

(703) 236-2926
EDUCATION, FAMILY PROGRAMS

(703) 243-2589
INDUSTRY AFFAIRS

(703) 841-3505
ARMY MAGAZINE, AUSA NEWS, COMMUNICATIONS

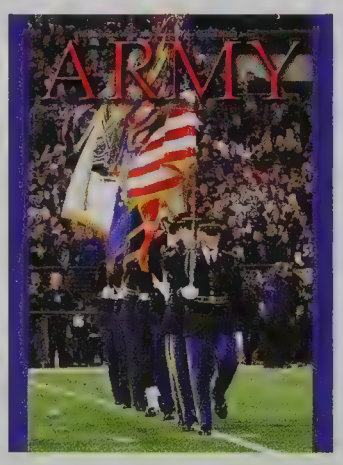
(703) 841-1442
ADMINISTRATIVE SERVICES

(703) 841-5101
INFORMATION TECHNOLOGY

(703) 525-9039
FINANCE, ACCOUNTING, GOVERNMENT AFFAIRS

(703) 841-7570
MARKETING, ADVERTISING, INSURANCE

This Month's Cover



U.S. Army soldiers with the Continental Color Guard, 3rd U.S. Infantry Regiment (The Old Guard) march onto the football field during a Joint Armed Forces Color Guard presentation at the Baltimore Ravens vs. San Francisco 49ers Thanksgiving football game in Baltimore, Md., November 24, 2011. *(DoD photograph/SSG Megan Garcia)*

ADVERTISERS IN THIS ISSUE

AUSA Membership	8
Boeing BDS	Cover II
Dell Computers	11
General Atomics Aeronautical Systems, Inc.	Cover III
GSA	37
Harris RF	Cover IV
Northrop Grumman Corporation	41
RAM Mounts	5
VT Miltope	3

ADVERTISING. Information and rates available from the Advertising Production Manager or our advertising representatives, who are:

The Audit Bureau

James E. Burke and **Irene Lamar**, 230 Park Ave., Suite 646, New York, NY 10169. (212) 697-2844. FAX (212) 682-1421. E-mail: advdpt@aol.com.

FREE TO AUSA MEMBERS

Receive AUSA's Legislative Newsletter electronically each week. Stay current on legislative activity that affects you.

E-mail AUSA at jrudowski@ausa.org using the subject line "Newsletter" to begin your free subscription.

GEN Gordon R. Sullivan, USA Ret.
President, AUSA

LTG Theodore G. Stroup Jr., USA Ret.
Vice President, Education, AUSA

Mary Blake French — *Editor in Chief*
Paul W. Bartels — *Art Director*
Larry Moffi — *Managing Editor*
Dennis Steele — *Senior Staff Writer*
Toni Eugene — *Associate Editor*
Joseph L. Broderick — *Production Artist*
Jeremy Dow — *Assistant Editor*
Katharine Scott — *Assistant Editor*
Jocelyn Wascher — *Editorial Assistant*

Contributing Editors
GEN Frederick J. Kroesen, USA Ret.; LTG James M. Dubik, USA Ret.; and Scott R. Gourley

LTG Thomas G. Rhame, USA Ret.
Vice President, Finance and Administration, AUSA

James E. Burke — *Advertising Manager*
Meagan B. Bailey
Advertising Production Manager

Norman Campbell — *Fulfillment Director*
Valerie Holman — *Fulfillment Manager*

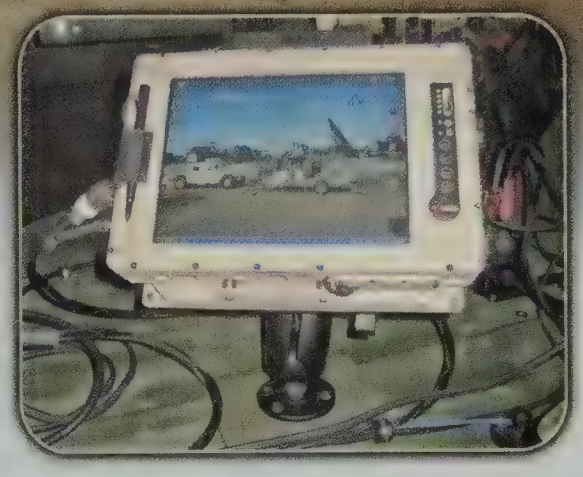
ARMY is a professional journal devoted to the advancement of the military arts and sciences and representing the interests of the U.S. Army.

Copyright©2011, by the Association of the United States Army.

□ **ARTICLES** appearing in ARMY do not necessarily reflect the opinion of the officers or members of the Council of Trustees of AUSA, or its editors. Articles are expressions of personal opinion and should not be interpreted as reflecting the official opinion of the Department of Defense nor of any branch, command, installation or agency of the Department of Defense. The magazine assumes no responsibility for any unsolicited material. □ **ADVERTISING.** Neither ARMY, nor its publisher, the Association of the United States Army, makes any representations, warranties or endorsements as to the truth and accuracy of the advertisements appearing herein, and no such representations, warranties or endorsements should be implied or inferred from the appearance of the advertisements in the publication. The advertisers are solely responsible for the contents of such advertisements. □ **RATES.** Individual memberships and subscriptions payable in advance (one year/three year): $21/$63 for E1-E4, cadets/OCS and GS1-GS4; $26/$71 for E5-E7, GS5-GS6; $31/$85 for E8-E9, O1-O3, W1-W3, GS7-GS11 and veterans; $34/$93 for O4-O6, W4-W5, GS12-GS15 and civilians; $39/$107 for O7-O10, SES and ES; life membership, graduated rates to $525 based on age; $17 a year of all dues is allocated for a subscription to ARMY Magazine; single copies, $3.00. Additional postage to all foreign countries, $15 per year. For other rates, write Fulfillment Manager, Box 101560, Arlington, VA 22210-0860.

ARMY (ISSN 0004-2455), published monthly. Vol. 62, No. 1. Subscription $34 a year. Publication offices: Association of the United States Army, 2425 Wilson Blvd., Arlington, VA 22201-3326, (703) 841-4300, FAX: (703) 841-3505, e-mail: armymag@ausa.org. Visit AUSA's web page on the Internet at www.ausa.org. Periodicals postage paid at Arlington, Va., and at additional mailing office.
POSTMASTER: Send address changes to ARMY Magazine, Box 101560, Arlington, VA 22210-0860.

RAM® MILITARY MOUNTS



Contractors who trust RAM®

NORTHROP GRUMMAN

Raytheon

LOCKHEED MARTIN

GENERAL DYNAMICS

Rockwell Collins

TRW

THE RAM® MOUNT ADVANTAGE

- RAM® Shock Absorbing Mounts Protect Electronics for Improved Reliability
- Field Proven for Over 15 Years
- Made in the USA
- Lifetime Warranty

WWW.MILITARYMOUNT.COM

National Products, Inc. I Address: 8410 Dallas Ave. S., Seattle, WA 98108
Phone: (206) 763-8361 I Fax: (206) 763-9615
Website: www.ram-mount.com I Email: sales@ram-mount.com

Washington Report

National Guard Hopes to Join JCS

Despite the unanimous opposition of the Joint Chiefs of Staff, in late November the Senate passed legislation that would give the Chief of the National Guard Bureau a permanent JCS seat.

By unanimous voice vote, the Senate added the National Guard Empowerment Act to the 2012 Defense authorization bill. The Senate passed that bill a few days later, and it must be reconciled with the version of the House bill passed earlier, which contains a similar provision.

All six members of the Joint Chiefs—chairman, vice chairman and chiefs of the military services—testified before the Senate Armed Services Committee that the addition of the National Guard leader to the panel was unnecessary and would create legal problems. Army Chief of Staff Raymond T. Odierno said he was "bound to communicate my explicit opposition to this post ... for several reasons." Among them, he noted, is that the inclusion would represent only two of the seven reserve components and would "create confusion, imbalance and challenge interoperability." Objections were also voiced that the "move would undercut civilian control" because the four military services have a civilian secretary while the National Guard does not.

The National Guard chief sits in on all Joint Staff meetings as a nonofficial member at the invitation of the chairman, who voiced his satisfaction with the status quo.

Veterans Tax Credits. In late November, President Obama signed into law two new tax credits that will help veterans find jobs. The Returning Heroes Tax Credit offers businesses a maximum credit of $5,600 for each unemployed veteran they hire. The Wounded Warriors Tax Credit provides businesses that hire veterans with service-connected disabilities a maximum credit of $9,600 per person.

The Returning Heroes Tax Credit provides an incentive to hire both short-term and long-term unemployed veterans. Employers who hire veterans unemployed at least four weeks will receive a credit of 40 percent of the first $6,000 in wages, up to $2,400. Employers who hire veterans unemployed longer than six months will receive a credit of 40 percent of the first $14,000 in wages, up to $5,600.

The Wounded Warrior Tax Credit maintains the existing Work Opportunity Tax Credit of a maximum of $4,800 for hiring veterans with service-connected disabilities. The new law doubles that maximum to $9,600 for hiring veterans with service-connected disabilities who have been unemployed longer than six months.

The credits, which received unanimous support in Congress, are the first proposals included in the administration's jobs bill submitted in September to be signed into law. At the signing, President Obama urged businesses, "Hire a veteran today. They will make you proud, just as they've made this nation proud."

Senate Passes Defense Bill. After much debate, the Senate passed the fiscal year 2012 defense authorization bill in early December, authorizing $527 billion for the Pentagon's base budget and $117 billion for overseas contingency operations. The Senate bill must now be reconciled with the House legislation, which passed earlier, and disagreements resolved before a final version goes to President Obama for his signature.

The bill, which was passed by a vote of 93-7, sets a 1.6-percent pay raise for military personnel. The Senate agreed to numerous amendments, among them provisions that would:

- End the deduction of VA survivor benefits from Survivor Benefit Plan annuities.
- Direct a review of all current DoD military spouse employment programs.
- Provide for employment and reemployment rights for certain individuals ordered to full-time National Guard duty.

Contentious debate over how the government detains terrorist suspects slowed passage of the bill. The disagreement centered on a provision mandating that members of al Qaeda and its affiliates, including individuals captured in the United States, be held in military rather than civilian custody. Senators finally compromised and stated that the bill would not affect existing law regarding the detention of U.S. citizens and lawful residents, though the White House has threatened to veto such a provision because it would restrict the administration's handling of suspected terrorists.

U.S. Army / SSG Megan Garcia

U.S. Army soldiers (right) of the 3rd U.S. Infantry Regiment (The Old Guard) at a wreath-laying ceremony at the grave site of President John F. Kennedy in Arlington National Cemetery, Va., on November 17, 2011, commemorate the 50th anniversary of the wearing of the Green Beret, authorized by Kennedy in 1961.

News Call

Afghanistan Security Transition Moves into Second Phase

The second stage of transition of security from American troops to Afghan security forces commenced in December as the United States began drawing down its forces.

When stage-two is complete, Afghan security forces will oversee an area that includes roughly 50 percent of the nation's population. Stage-two includes some or all of 18 provinces, most of them in the north and west. The initial transfer of seven geographical areas was completed in July 2011.

As the transition progresses, 10,000 U.S. forces will have redeployed by the end of December. The United States projects withdrawing another 33,000 by the end of 2012, while shifting its focus from southern Afghanistan to Regional Command-East (RC-E).

In a teleconference with reporters at the Pentagon, MG Daniel Allyn, commanding general of RC-E, said the main effort there "continues to be partnership with, and development of, the Afghan security forces to achieve security primacy for the approximately 7.5 million Afghans in the 14 provinces." He noted that his troops partner with 68,000 Afghan security forces and that he is "seeing tangible progress in the Afghan security forces and provincial government capacity."

MG Allyn also pointed out that the arrival of an expeditionary sustainment command to the NATO Training Mission-Afghanistan led by LTG Daniel P. Bolger will help logistics development for Afghan security forces.

In answer to a question about the importance of night raids—one of the sticking points in reaching a security agreement with Afghanistan—MG Allyn said the targeting of insurgent network leaders is a vital component of his efforts, posing minimal risk to civilians. Afghanistan President Hamid Karzai has set the end to night raids as a condition for approving any strategic partnership between the two countries.

LTG Curtis M. Scaparrotti, commander of International Security Assistance Force Joint Command and deputy commander of U.S. Forces-Afghanistan, insists that the airstrikes are an important tool in the campaign against the Taliban. "Special operations forces allow us to put constant pressure across the entire insurgent network," he told *The Wall Street Journal* in November. They are "safe for the populace as well … because they're done at night when there is very little civilian activity."

At a conference in Bonn, Germany, in early December, dozens of organizations and countries met to plan Afghanistan's future after 2014, the deadline for withdrawal of all troops. There, President Karzai pleaded that Afghanistan needs not only political and military support for an additional 10 years, through 2024, but also financial assistance until 2030.

NATO Strike in Question. A late November skirmish that resulted in the deaths of 24 Pakistani soldiers appears to be a case of mistaken identity, in which both NATO and Pakistani

U.S. Army/SGT Victor R. Everhart

Soldiers with Troop A, 1st Squadron, 13th Cavalry, stand guard while on patrol in Wardak Province, Afghanistan, in late November. Deployed from Fort Bliss, Texas, the soldiers are working with Afghan security forces to build stability in the region.

AUSA Membership Benefits

Bank of America, N.A.:

AUSA Bank Card
Start receiving great rewards and show your support for AUSA. Call 866-438-6262.

Institute of Land Warfare:

ILW offers writing programs; conducts conferences and symposia; publishes essays, Defense Reports, newsletters; and provides research on defense issues. Call 800-336-4570, ext. 630 for details.

AUSA Mastercare Group Insurance Plans:

- Active Duty & Retiree TRICARE Supplement
- Accidental Death and Dismemberment Plan
- 10-Year Level Term Life Insurance Plan
- Group Term Life Insurance Plan
- Short-Term Recovery Plan
- Long Term Care Plan

Call 800-882-5707 for more information.

Dental and Vision Discount Plans:

Discounts offered to AUSA members on dental services and vision exams.

This plan is not available in the states of MT and VT.

Emergency Assistance Plus:

If you or a family member gets injured or sick while on travel this plan will provide medical assistance, bring a medical specialist or loved one to your side and much more. Call 888-633-6450 for more information.

Government Vacation Rewards:

AUSA now offers its members discounts on cruises, resorts and tour providers.

GEICO Insurance – Auto, Home, Condo/Renters, and Boat:

In states where available, a special member discount may apply. Call 800-861-8380.

Apple Member Purchase Program:

Apple Computers offers AUSA members a substantial savings on its computers. Call 800-MY-APPLE and mention you are a member of AUSA.

Book Program:

Members receive discounts on selected military books.

Army Times/Federal Times:

Subscription discounts on Army Times/Federal Times. Call 800-368-5718.

Dell Member Purchase Program:

AUSA members can now receive discounts on Dell PCs.

AUSA Career Center:

AUSA members can now post their resumes and employers can advertise any new openings they have. Visit our Web site and go to the Resources drop-down, then Career Center.

University of Maryland University College (UMUC):

University of Maryland University College (UMUC) is pleased to offer undergraduate and graduate study programs to AUSA members worldwide. For some program participants, a discounted tuition rate will apply.

Armed Forces Services Corporation:

AFSC guides you through the details on military entitlements for your retirement and survivor planning/assistance for your spouse. Call or e-mail: 888-237-2872, info@AFSC-USA.com.

Choice Hotels International®:

AUSA members can receive discounts on hotel rooms at the following hotels.

- Comfort Inn®
- Comfort Suites®
- Quality®
- Sleep Inn®
- Clarion®
- Cambria Suites®
- MainStay Suites®
- Suburban Extended Stay Hotel®
- Econo Lodge®
- Rodeway Inn®

Call 800-258-2847 and use the code 00800700.

Car Rental Program:

Use the reservation codes on the back of your membership card and save at:

• AVIS	800-331-1441	• Hertz	800-654-6511
• Budget	800-455-2848	• National	800-Car-Rent
• Alamo	800-354-2322 *(rental for under age 25 available)*		

Publications:

- *ARMY* Magazine every month, including the October *ARMY Green Book*.
- *AUSA NEWS* every month.

Member discounts and services are subject to change.

For more detailed information visit Members Only Benefits and Services at www.ausa.org

800-336-4570 ext. 664 • 703-907-2670

GENERAL OFFICER CHANGES*

MG B.S. Champoux from CG, 25th ID/CG, USD-C, OND, Iraq, to Asst. CoS, C-3/J-3, UNC/CFC/USFK/ Dep. CG, Eighth U.S. Army, Korea.

MG W.K. Fuller from Dep. CG, USASOC, Fort Bragg, N.C., to CG, 25th ID, Schofield Barracks, Hawaii.

MG J.O. Keenan from Cmdr., MEDDAC, Fort Carson, Colo., to Chief, ANC.

MG T.J. Richardson from Dir., J-4, USF-I, OND, Iraq, to CG, SDDC, Scott AFB, Ill.

Brigadier Generals: **J.L. Bass** from CG, ECC, Redstone Arsenal, Ala., to Dir. for Contracting, OASA (ALT), Washington, D.C.; **D.G. Fox** from Dep. CG, Eighth U.S. Army, Korea to Dep. CG, 1st ID and Fort Riley, Fort Riley, Kan.; **G. J. Franz III** from Chief, CJ-2, IJC, OEF, Afghanistan, to Dir., Current Ops., J-33, USCYBERCOM, Fort Meade, Md.; **T.C. Harrison** from Dep. Chief of Contracting Mgmt., USACE, Washington, D.C., to CG, ECC, Redstone Arsenal; **S.B. Leisenring** from CG, MICC, Fort Sam Houston, Texas, to Dep. Cmdr., JTSCC, OEF, Afghanistan; **D.K. MacEwen** from XO to the VCS, Army, Washington, D.C., to Cmdr., SSI, Fort Jackson, S.C.; **M.A. McAlister** from CG, SSI, Fort Jackson, S.C., to Military Dep. Dir. for Army Budget, OASA (FM&C), Washington, D.C.; **B.T. Roberts** from Dir, ITAT-A, USF-I, OND, Iraq, to CG, USATC&FJ, Fort Jackson, S.C.; **J.E. Simpson** from SCO-I, JTSCC, OND, Iraq, to Dep. Chief of Contracting Mgmt., USACE, Washington, D.C.; **K.F. Vollmecke** from Dir. for Contracting, OASA (ALT), Washington, D.C., to CG, MICC, Fort Sam Houston, Texas.

■ ***ANC**—Army Nurse Corps; **CoS**—Chief of Staff; **ECC**—U.S. Army Expeditionary Contracting Cmd.; **ID**—Infantry Division; **IJC**—International Security Assistance Force Joint Cmd.; **ITAT-Army**—Iraq Training and Advisory Team-Army; **JTSCC**—Joint Theater Support Contracting Cmd.; **MEDDAC**—U.S. Army Medical Department Activity; **MICC**—Mission and Installation Contracting Cmd.; **OASA (ALT)**—Office of the Assistant Secretary of the Army (Acquisition, Logistics and Technology); **OASA (FM&C)**—Office of the Assistant Secretary of the Army (Financial Management and Comptroller); **OEF**—Operation Enduring Freedom; **OND**—Operation New Dawn; **SDDC**—Military Surface Deployment and Distribution Cmd.; **SCO-I**—Senior Contracting Official-Iraq; **SSI**—U.S. Army Soldier Support Institute; **UNC/CFC/USFK**—United Nations Cmd./Combined Forces Cmd./U.S. Forces Korea; **USACE**—U.S. Army Corps of Engineers; **USASOC**—U.S. Army Special Operations Cmd.; **USATC&FJ**—U.S. Army Training Center and Fort Jackson; **USCYBERCOM**—U.S. Cyber Cmd.; **USD-C**—U.S. Division-Center; **USF-I**—U.S. Forces-Iraq; **VCS**—Vice Chief of Staff.*

**Assignments to general officer slots announced by the General Officer Management Office, Department of the Army. Some officers are listed at the grade to which they are nominated, promotable or eligible to be frocked. The reporting dates for some officers may not yet be determined.*

COMMAND SERGEANTS MAJOR CHANGES*

CSM D. Abbot from IMCOM Korea Region to U.S. Installation Cmd. Family, MWR, San Antonio, Texas.

CSM D. Bohn from ISAF, Kabul, Afghanistan, to FORSCOM, Fort Bragg, N.C.

CSM T. Parham from Installation CSM, Fort Drum, N.Y., to 13th Sustainment Cmd. (Expeditionary), Fort Hood, Texas.

CSM B.H.S. Scott Jr. from WTC, Germany, to NRMC, Washington, D.C.

CSM J.E. Spencer from 21st TSC, Germany, to U.S. Army Sustainment Cmd., Rock Island, Ill.

CSM S.K. Young from 75th Fires Bde., Fort Sill, Okla., to USAFAS, Fort Sill.

■ ***FORSCOM**—U.S. Army Forces Cmd.; **IMCOM**—U.S. Army Installation Management Cmd.; **ISAF**—International Security Assistance Force; **MWR**—Morale, Welfare and Recreation; **NRMC**—Northern Regional Medical Cmd.; **TSC**—Theater Sustainment Cmd.; **WTC**—U.S. Army Warrior Transition Cmd.; **USAFAS**—U.S. Army Field Artillery School.*

*Command sergeants major positions assigned to general officer commands.

troops claim to have mistaken each other for Taliban forces.

Pakistan's immediate response was to close two border crossings into Afghanistan, blocking NATO and U.S. supplies. Pakistan also ordered the United States to vacate a Pakistani air base used by U.S. drones.

Afghan and U.S. officers say they called in the airstrikes on two border outposts after coming under fire from Pakistan. *The Wall Street Journal* reported that anonymous officials said the United States had obtained clearance for the raid from Pakistan. Pakistan insisted the U.S. gave incorrect coordinates for the strikes and said Pakistani forces returned fire only after the attacks on them had begun.

An investigation into the incident led by U.S. Central Command was begun almost immediately, and an initial report is due as we go to press.

GEN Sullivan Honored. The George C. Marshall Foundation of Lexington, Va., has selected GEN Gordon R. Sullivan, U.S. Army retired, to receive its Andrew J. Goodpaster Award at a luncheon at the U.S. Chamber of Commerce in Washington, D.C., in May. The award, named for longtime trustee and chairman of the Foundation, GEN Andrew J. Goodpaster, is presented to Americans in a variety of fields who "have exhibited great courage, selfless service, patriotism and leadership in their lives and careers."

GEN Sullivan has been AUSA president and chief operating officer since 1998. He concluded his 36-year Army career as the 32nd Chief of Staff of the U.S. Army in 1995. He had previously served as vice chief of staff, deputy chief of staff for operations and plans and commanding general, 1st Infantry Division (Mechanized), Fort Riley, Kan. His overseas assignments included four tours in Europe, two in Vietnam and one in Korea. Commissioned a second lieutenant of armor upon graduation from Norwich University, GEN Sullivan earned a master's degree in political science from the University of New Hampshire. His professional military education includes the U.S. Army Armor School

Army Casualties in Afghanistan

The following U.S. Army soldiers were reported killed in Operation Enduring Freedom from November 1 to November 30, 2011. All names have been released through the Department of Defense; families have been notified.

SPC James R. Burnett Jr., 21
PFC Sarina N. Butcher, 19
LTC David E. Cabrera, 41
PFC Matthew C. Colin, 22
SSG Ari R. Cullers, 28
SGT James M. Darrough, 38
PVT Jackie L. Diener II, 20
PFC Adam E. Dobereiner, 21
SGT Carlo F. Eugenio, 29
SPC Christopher D. Gailey, 26
SFC Johnathan B. McCain, 38
SFC Dennis R. Murray, 38
SSG Christopher R. Newman, 26
PFC Cody R. Norris, 20
SPC Calvin M. Pereda, 21
PFC Theodore B. Rushing, 25
SPC Sean M. Walsh, 21

Army Casualties in Iraq

The following U.S. Army soldiers were reported killed in Operation New Dawn from November 1 to November 30, 2011. All names have been released through the Department of Defense; families have been notified.

SPC David E. Hickman, 23
1LT Dustin D. Vincent, 25

Courtesy photo

The U.S. Army Space and Missile Defense Command/Army Forces Strategic Command conducted the first flight of the Advanced Hypersonic Weapon concept in November.

Basic and Advanced Courses, the Command and General Staff College, and the Army War College. He is chairman of the Board of Trustees of Norwich University.

CCAD Recaps Helos. Corpus Christi Army Depot (CCAD), Texas, where UH-60 Black Hawk helicopters are rebuilt in order to reduce the cost of replacing them, completed a record-breaking 48 "recapitalizations" in 2011. The recap program saves more than 45 percent in tax dollars by rebuilding the aircraft as opposed to purchasing new ones.

It takes just under a year to rebuild the structural, engine and airframe components of an Alpha model UH-60 with more capability and power so that it performs like the newer Lima model. The process extends the life of the Black Hawk by 10 years and equips it with the most up-to-date systems and technology. Last year CCAD completed 38 Alpha-to-Lima model recaps.

The increase in completed recaps, according to CCAD commander COL Christopher Carlile, is the work of "the entire team." Personnel from accounting to final assembly inspectors developed more efficient processes and methods and worked together to increase production.

AHW Test. In November, the Army completed a successful test of an advanced hypersonic weapon (AHW) prototype that can travel long distances within the Earth's atmosphere at approximately five times the speed of sound. U.S. Army Space and Missile Defense Command/Army Forces Strategic Command (USASMDC/ARSTRAT) launched the vehicle—which flew at hypersonic speed from the Pacific Missile Range Facility on Kauai, Hawaii, to the Ronald Reagan Ballistic Missile Defense Test Site, U.S. Army Kwajalein Atoll, a distance of 2,300 miles, in less than 30 minutes.

The test provided information on hypersonic boost-glide technologies and performance for long-range atmospheric flight. A three-stage booster system successfully launched the AHW glide vehicle and deployed it on a

DELL

The power to do more

Dell recommends Windows® 7.

Helps military families stay connected.

- Powered by an optional 2nd gen Intel® Core™ i7 processor—the performance you need and style you want
- Genuine Windows® 7 Home Premium

Military Member Pricing starts at

$881.99

The new XPS 14z laptop

Amazingly thin **Incredibly powerful.**

Get **More You** at Dell.com/mpp/militaryrewards or 866-456-0830

Your PC, simplified. Windows 7

PRICING/AVAILABILITY: ALL ORDERS ARE SUBJECT TO APPROVAL AND ACCEPTANCE BY DELL. Offers subject to change; not combinable with other offers. Taxes, shipping, handling and other fees apply. Program: new purchases only. Dell reserves right to cancel orders arising from pricing or other errors.

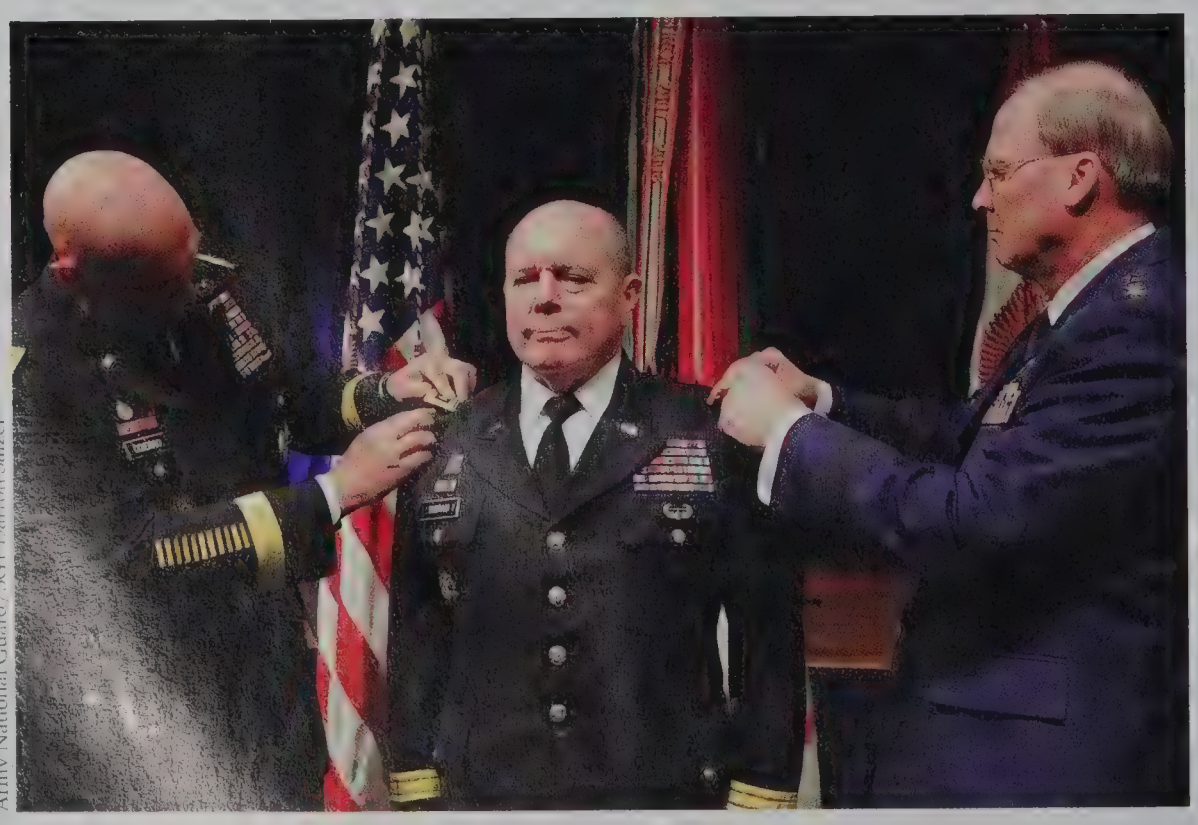
U.S. Army/SGT Andrea Merritt

Record Airdrop. *A C-130 releases a 16-foot platform carrying an all-terrain forklift near Forward Operating Base (FOB) Curry in Eastern Afghanistan's Paktika Province in November. The platform, weighing 15,000 pounds, was the first of its kind and the heaviest load ever air-dropped in Afghanistan during Operation Enduring Freedom. The packing material surrounding the equipment cracked during landing, but the forklift remained intact and was put to immediate use. Surrounded by inhospitable and mountainous terrain, FOB Curry relies heavily on airdrops for supplies.*

nonballistic atmospheric glide trajectory to the planned impact site at Kwajalein.

The USASMDC/ARSTRAT office in Huntsville, Ala., manages and executes the AHW program, and the U.S. Army Aviation and Missile Research, Development and Engineering Center in Huntsville, Ala., developed the thermal protection system. Sandia National Laboratories, Albuquerque, N.M., developed the booster system and glide vehicle.

DoD is employing the AHW to develop a system that could deliver a precision conventional—non-nuclear—weapon anywhere on Earth within an hour.



Army National Guard/SGT Darron Salzer

LTG William E. Ingram Jr., 20th director of the Army National Guard, receives his third star from GEN Raymond T. Odierno, Army Chief of Staff, and Air Force Gen. Craig McKinley, chief of the National Guard Bureau, during a ceremony at the Pentagon in November.

New ARNG Director. William E. Ingram Jr. was confirmed in November as the director of the Army National Guard (ARNG) and for appointment to the rank of lieutenant general. He will succeed MG Raymond Carpenter, who has served as acting director of the ARNG since May 2009.

As director, LTG Ingram will formulate, develop and coordinate all programs, policies and plans affecting the Army National Guard's more than 350,000 citizen-soldiers. He is the former adjutant general of the North Carolina National Guard and was special assistant to the Army Vice Chief of Staff.

LTG Ingram was the Distinguished Graduate from Officer Candidate School at the North Carolina Military Academy at Fort Bragg, N.C., in 1972 and has served as an Army National Guard officer for nearly 40 years, nine of them as adjutant general, North Carolina. He has led U.S., U.N. and NATO forces in Kosovo, Macedonia and Croatia and has assumed leading roles in homeland security and domestic disaster relief. His experience also includes service as the chairman of the Army Reserve Forces Policy Committee. ★

Front & Center

The Combat Soldiers' Dilemma

By GEN Frederick J. Kroesen
U.S. Army retired

There is a problem faced by all combat soldiers, sailors, marines and airmen who have to make decisions in wartime that can later be questioned by those who wish to fault the action.

A recent headline read, "NATO Countries May Face War Crimes Inquiry." The accompanying article explained that the International Criminal Court "may" examine allegations of crimes committed by NATO in Libya where civilian casualties occurred. This, of course, is only the latest of such charges that have become more frequent and more intense since the Nuremberg trials sent German leaders to severe punishment or death for carrying out Hitler's monstrous programs during World War II. Furthermore, the scope of inquiry regarding unwarranted acts, deaths and injuries, and questionable conduct has expanded exponentially during all wars, especially when U.S. forces are involved.

Justification for such pursuit typically includes references to such occurrences as the My Lai massacre, the abuse of prisoners at Abu Ghraib or "torture" inflicted by "enhanced interrogation." There is no denying that criminal acts occur, but justification sometimes questions President Truman's decision to drop the atomic bombs on Japan or the Roosevelt-Churchill decisions to firebomb Hamburg, Berlin, Tokyo and other "civilian" targets.

Over the years, the pattern of inquiry to find and punish those who are guilty of war crimes by the military has led to ever more stringent rules of engagement designed to prohibit and protect against civilian casualties and any other criminal acts. It has also spawned a demanding educational program for all servicemembers on the rules of war, the Geneva Conventions, codes of conduct and an awareness of the need to proceed legally. An offshoot of such attention has been the reticence—sometimes unwillingness—of commanders and other leaders to make decisions without the consideration and concurrence of their staff judge advocate or some legal advisor. Whether such decisions are good or bad will be determined only by historians, but it is apparent that they can be complicated, influenced or delayed markedly when legality must be certified in advance. Only recently the issues have been further complicated by the question of the legal status of an American citizen in a war zone who is accused of participation or complicity in enemy activities.

This is the combat soldier's dilemma. A young private in Afghanistan, remembering that educational program and knowing the rules of engagement, being humane, compassionate, friendly and respectful to the native population, finds himself being shot at from a building where children were playing only minutes ago. The shots came from a window, a doorway and the roof. He wonders whether that means one sniper using varied fighting positions or perhaps a squad of enemy soldiers. And now his sergeant orders him to lob a grenade through the window. A lawful order? Where are those children? Will he be accused of murder if he obeys? Will he be court-martialed if he disobeys?

A much more detailed and comprehensive presentation of this kind of dilemma was provided in the November ARMY Magazine article entitled "How Our Training Fails Us When It Counts" by Kevin Bell. His firsthand account of facing such questions up close is a gripping portrayal perhaps of why post-traumatic stress syndrome has become a major issue.

A soldier's life has become much more complicated since World War II. At that time, wars were no longer purely military; they had become total, and civilians in the war zone were considered enemies until proven otherwise. I didn't think twice about firing an artillery preparation into a German town from which we had received fire or in which we had seen tanks. I certainly didn't worry about whether a German soldier was an American citizen despite being aware that there were some in that category. My brother, a B-17 pilot, didn't question the legality of an order to drop his bombs on targets in a German city or town. And I venture that the crew of the *Enola Gay* were untroubled about who ordered them to Hiroshima and completely unconcerned about whether it was lawful.

Lawyers are not responsible for our soldiers' missions in Afghanistan or the situations in which they find themselves, but they are culpable for creating the dilemma and the ever-expanding investigations of soldiers' behavior. Given that culpability, I believe the legal profession ought to have done a better job of preventing—or at least alleviating—the problem. That wars have become total ought to mean that civilian casualties are not a heinous crime but a consequence or eventuality associated with the conduct of modern war. Civilians in war industries are as much a part of war effort as soldiers. Civilians working for contractors in Iraq and Afghanistan on essential services rivaled, in numbers, the military forces engaged. Are not such services and those engaged in them legitimate targets?

I do not have answers, but I suggest that the legal profession search for them and that our understanding of the rules of war be updated. Perhaps our prestigious law schools might encourage a few doctoral dissertations on the subject while today's lawyers spend more time on how—rather than how not—to conduct military operations. □

***GEN Frederick J. Kroesen**, USA Ret., formerly served as Vice Chief of Staff of the U.S. Army and commander in chief of U.S. Army Europe. He is a senior fellow of AUSA's Institute of Land Warfare.*

A Closer Look at the 'Build Partner Capacity' Mission

By LTG James M. Dubik
U.S. Army retired

During my recent visit to U.S. Army Europe I had the opportunity to visit almost every installation of importance in Germany and to talk to senior leaders involved with partner outreach activities in Europe. The nexus of all this activity was the 7th U.S. Army Joint Multinational Training Command in Grafenwoehr, Germany. What really impressed me most was the participation of all nations in activities related in some sense to international development in their armies as well as, in most cases, preparation for their service in Iraq and Afghanistan. What I found troublesome during my trip was a seemingly inconsistent drumbeat to shrink the U.S. Army presence in Europe, driven apparently by the current financial situation, with no obvious linkage to the strategic position of the United States in Europe.

This article is important in the context of my visit because it discusses the necessity for a strategy reflecting American global interests—not simply regional interests. The United States has enduring interests and relationships in Europe as well as those in Asia. While much was accomplished during the Pacific visit by the President of the United States, one can only hope the next strategic statement by a U.S. official will be one which acknowledges our alliances in Europe and balances our interests globally.

—GEN Gordon R. Sullivan, USA Ret.

Building partner capacity is a mission worthy of more serious thought than it appears to have been given so far. Right now the discussion is confused, and the confusion will not help services determine the capabilities they need to build into their forces.

Former Secretary of Defense Robert M. Gates, even as he notes the importance of this mission for future U.S. security strategy in his May/June 2010 *Foreign Affairs* article, "Helping Others Defend Themselves: The Future of U.S. Security Assistance," actually creates some of this confusion. In one part of the article, for example, he equates the mission with "building up the military and security forces of key allies and local partners." In another part, the mission is "advising and mentoring indigenous security forces." Yet in another, he links "building up the operational capacity of … partners" with "building the institutional capacity … or the human capital … needed to sustain security over the long term." The first of the former Secretary's conceptions concerns current allies and partners, those with already mature military forces; the second concerns forces-in-being that have tactical shortcomings; and the third concerns creating both forces and security institutions from whole cloth.

The use of *security forces, indigenous security forces* and *operational capacity* leaves an important question open: Do these terms refer to both military and police forces as well as the associated ministries of defense and interior, or just to military forces and defense ministries? That issue aside, a closer look at the three categories of partner-capacity missions as they apply to military forces is in order.

First, building the capacity of current allies and partners with already mature military forces. Over the past several decades, the capacities of our allies and partners have diminished significantly. Part of the reason is the overall trend to reduce military spending that began with the end of the Cold War. This trend is well documented and has resulted in greatly diminished capacity in every European nation. The first aspect of building partner capacity, therefore, requires that the United States rededicate itself to a system of alliances and partnerships appropriate for the current strategic environment.

A proper, global alliance and partner program requires routine single-service and joint exercise and experimental programs, structures, and agreements to improve force interoperability, leader-exchange programs, and discussions about ways to blend investments and operational capabilities among the alliance or partner nations' militaries. A "Fortress America" approach that brings all forces home is unhelpful in this regard. Alliances and partnerships are relationships, and no relationship is sustainable if it is only long-distance, episodic and one-sided.

Good alliance relationships enhance partner capacity. They also increase U.S. access to airspace, logistics bases, air and sea ports of entry, and logistical lines of communication—all necessary for global operations. Thus, they increase U.S. strategic options. U.S. forces that are too small to execute the activities necessary for "alliance maintenance" put all this at risk. America cannot hope to increase the capacity of current allies and partners with already mature military forces with a force too small to actually do what is necessary to establish and sustain military-to-military relationships.

Second, fixing the tactical shortcomings of indigenous military forces. Some think that this aspect of partner capacity building is a mission for America's special operations forces. Maybe, but in only very limited situations.

More often, however, fixing tactical shortcomings is insufficient to build any real partner capacity. Tactical shortcomings are the result of institutional deficiencies: a poor training system; an inadequate leader selection and development system; a poor command structure; often weak acquisition, maintenance, supply and logistics systems; and poor personnel policies that result in a corrupt promotion system and insufficient pay and allowances. Fixing tactical shortcomings may result in im-

proved battlefield performance, but only in the short run. Allowing the systemic deficiencies to continue will ultimately erode short-term performance improvements and leave the potential partner with the same, or worse, shortcomings as were present prior to the assistance.

The importance of institutional and supporting systems is also clear when one analyzes the role of confidence with respect to a force's fighting ability. Soldiers, sailors, airmen and marines fight better when they are confident in themselves, their buddies, their equipment, their leaders and the systems designed to support them in battle—the intelligence, fire support, medical care, communications and supply systems, for example.

America cannot hope to build the capacity of potential partners by aiming at only short-term, tactical improvement. Building partner capacity means improving battlefield performance and increasing a force's confidence. Both require setting in place better institutional and support systems that will continually improve a potential partner's capacity over time. Building partner capacity means not only sharpening the tip of the spear but also fixing the shaft.

Third, creating both military forces and security institutions from whole cloth. This category of partner capacity building is the most expansive. It mirrors the roles of Multinational Security Transition Command-Iraq, NATO Training Mission-Iraq and NATO Training Mission-Afghanistan. Tackling this kind of partner capacity-building mission requires a broad enterprise approach that builds security forces simultaneously with creating security ministry proficiency. Not only does this category require the creation of a training infrastructure—training facilities of many types, barracks, and associated headquarters and processes to manage training—to generate security forces, but it also requires putting in place the institutional capacity to recruit, train, acquire, develop, sustain, fund and manage all facets of a nation's security forces in order to replenish and continually improve those forces.

U.S. Army/SGT Christopher Klutts

This task is enormous and requires a complex civil-military organization to execute it properly. The size, composition and task-set of this organization change as partner capacity improves. By its very nature, however, this kind of partner capacity-building mission is a long-term affair and one that must be consistent with, and in service to, the partner nation as well as American strategic interests. American and allied efforts to rebuild the Japanese, German and Korean military are examples of this category of partner capacity building. Perhaps our efforts in Iraq and Afghanistan will ultimately fall into this category; only time will tell.

Former Secretary Gates' article contains all three types of partner capacity building. His essay ends by claiming, "Helping other countries better provide for their own security will be a key and enduring test of U.S. global leadership and a critical part of protecting U.S. security, as well." If he is right—and the current administration seems to believe that he is—then three important implications emerge.

All categories of partner capacity-building missions—whether single-service or joint activities—are leader-intensive, requiring both noncommissioned and commissioned officers, proven leaders with experience. The leader-to-led ratio of each service, therefore, must take into account that leaders are necessary in the service's units and in its institutional base, and available for partner capacity-building activities. Otherwise, unless the partner capacity-building activity occurs as part of a unit exercise program or a service's education system, it will require a "rob Peter to pay Paul" approach.

All categories of partner capacity-building missions are also presence missions. The first category uses mostly episodic presence—that is, exercises to build the capacity of current allies and partners. The other two categories require permanent or long-duration temporary presence. The force structure of each service, therefore, must take this presence into account. Deriving service force structures strictly from warfighting requirements—the method used heretofore by every administration—must be modified. Otherwise, when U.S. forces are employed, all partner-capacity activity will either be reduced significantly or stop entirely, resulting in the "six-year-old soccer" approach to partner capacity building—all players converging on the ball, leaving the rest of the field open—an approach that is not in the strategic interest of the United States.

Finally, all categories of partner capacity-building missions rely upon single-service or joint general-purpose forces. Special operations forces have a role to play in each of the three categories, and under certain limited conditions they may be able to execute

the second category by themselves. They are insufficient, however, to conduct the kind of exercise program called for in the first category, to execute all of the institutional and supporting system improvements associated with the second category, or to manage the vast enterprise necessary for the third category. The United States cannot hope to build the capacity of potential partners by overly shrinking its general-purpose forces and then asking its special operations forces to do what they cannot.

Building partner capacity is a mission worthy of more serious thought. If former Secretary Gates is correct in his assessment that there are three categories of partner capacity, the implications for service structures are significant. If he's wrong, and American strategic leaders actually have a more narrow understanding of the mission, this understanding deserves clearer articulation and more thorough analysis. Right now, the discussion is confused, and the confusion will not help services determine the capabilities they need to serve America's strategic interests. □

***LTG James M. Dubik**, USA Ret., is a former commander of Multi-National Security Transition Command-Iraq and a senior fellow of AUSA's Institute of Land Warfare.*

Battling Another Army Crisis of Self-Confidence

By Richard Hart Sinnreich

If my recent correspondence is any guide, the Army is about to indulge in one of its periodic bouts of institutional paranoia, fearing a radical decline in the perceived utility, hence budgetary support, of ground combat capabilities. And as usual, that concern carefully ignores the possibility that the Army itself might have helped no little to bring that prospect about.

"I've definitely made up my mind. I'm going to vote for it or against it."

Of course, given Congress' recent failure to reach agreement on a deficit reduction scheme and the resulting threat of an additional $600 billion cut in defense expenditures over the next 10 years, the Army isn't the only military service looking over its shoulder. But because it's so manpower-intensive, the Army feels especially vulnerable.

Concern that Army force levels will diminish is nothing new. From a Cold War peak of nearly 800,000, active Army strength dropped after the first Gulf War to a post-World War II low of 480,000 before gradually rising to its present 560,000-odd soldiers. With the current departure of U.S. forces from Iraq and their projected withdrawal from Afghanistan by 2014, it can be counted upon to decline again.

It's not merely that inevitable reduction in the Army's active strength that has service champions worried, however. It's uncertainty about the Army's strategic purpose in the wake of two prolonged and unpopular counterinsurgency commitments.

"In my opinion," former Defense Secretary Robert Gates declared candidly in one of his last speeches before leaving office, "any future defense secretary who advises the president to again send a big American land army into Asia or into the Middle East or Africa should 'have his head examined,' as General MacArthur so delicately put it."

Gates carefully denied "suggesting that the U.S. Army will—or should—turn into a Victorian nation-building constabulary designed to chase guer-

rillas, build schools, or sip tea." Absent any future threat of conventional ground combat, however, it's hard to see what else would be left for the service to do.

The Marine Corps, America's other ground-intensive service, already has read the tea leaves. Warned by Gates in still another of his provocative speeches that it was at risk of becoming a second Army, the Corps is in the process of reverting to its roots, refurbishing its amphibious doctrine, repairing a long-strained relationship with its Navy parent, and marketing itself as America's rapidly deployable force-in-being, ideal for everything from short-notice forcible intervention to humanitarian operations.

The Army enjoys no such readily convincing fall-back. Its designed—indeed, statutory—purpose is to fight and win the nation's wars on land. Of course, as the government's largest single source of organized and disciplined manpower, it does other things, from training friendly nations' armies to disaster relief. But that's not why we pay soldiers. We pay them to fight.

The Army today thus faces another of its recurring crises of self-confidence, as it did after the first Gulf War, when optimists predicted that future wars would be won surgically with new information and precision weapons technologies, without any need to risk soldiers' lives in the messy and expensive business of ground combat. The Army's response was to try to turn itself into just such a technology-centric force.

In the event, techno-optimism perished in 2003 with the embarrassing failure of "shock and awe." What followed, however, was nearly as damaging. Having convinced its political masters that technology could be substituted for soldiers, the Army found itself engaged in precisely what, after Vietnam, its leaders had sworn that they would never permit themselves to be suckered into again. Meanwhile, what began as a punitive intervention in Afghanistan has devolved into the very sort of prolonged constabulary commitment that Mr. Gates denied recommending.

In the military, you do what you're told to the best of your ability, and that's just what the Army did, committing itself completely to counterinsurgency and nation-building, in the process forfeiting many of the conventional warfighting skills that made possible its quick victories against Iraq in 1991 and 2003. Now the problem is how to walk the cat back at a time of mounting fiscal crisis and against the predictable opposition of what by now has become a virtual army-within-the-Army of irregular warfare enthusiasts not eager to surrender their hard-won doctrinal preeminence.

To make matters worse, the newest hot-button defense concept is the Navy and Air Force's proposed AirSea Battle, a platform and technology-intensive warfighting concept aimed squarely at the Pacific Rim, one of the very arenas in which Gates warned against investing land forces, and from which concept, therefore, the Army thus far has been excluded, despite having 30,000-odd soldiers in South Korea and Japan.

It's not paranoia, the saying goes, when they're really out to get you. In the Army's case, the "they" is largely "we." Unless Army leaders can articulate why the nation can't afford to dispense with a war-winning Army, they may ultimately find themselves without one. □

***Richard Hart Sinnreich** writes regularly for* The Lawton *(Okla.)* Sunday Constitution. *This article originally appeared in the November 27, 2011,* Lawton Constitution *and is reprinted by permission of the author.*

Force Structure and the Army Budget

By MAJ Glenn A. Henke

Impending budget cuts will soon force the Army to make tough choices about force structure. During this summer's debt-ceiling debate, a prominent senator recommended reversing the Grow the Army (GTA) initiative and returning force levels to those of 2007, saving $92 billion over 10 years. Even without specific reversals of GTA, any large budget cut will undoubtedly include force cuts as the quickest way to reduce costs.

Force structure challenges faced by the Air Defense Artillery (ADA) branch are instructive for the rest of the Army as a transformation "bill-payer" finds itself with increasing missions and emerging capability gaps. Just as the Army will soon have to determine the optimal number and force structure of brigade combat teams (BCTs), the mix and structure of air defense forces is another question that the Army will have to answer shortly.

Before transformation, the active component Air Defense Artillery consisted of Patriot battalions supporting corps and above, and short range air defense (SHORAD) battalions assigned to each of the Army's divisions. Transformation removed the SHORAD battalions from the divisions and reorganized the size and structure of Patriot battalions. Several of the SHORAD battalions were deactivated, while the rest transformed into Patriot battalions or composite air and missile defense (AMD) battalions with both Patriot and Stinger-based Avenger fire units. The Army approved two additional Patriot battalions in conjunction with GTA, with the second being activated in 2011. The Army retains two Avenger battalions at Joint Base Lewis-McChord, Wash., and Fort Campbell, Ky., and Avenger batteries in each of the AMD battalions.

Like all Army forces, the ADA branch is expeditionary and, in some cases, forward-deployed. Requirements and agreements with allies in Korea, Germany and Japan led the Army to forward-deploy four Patriot battalions. Support to the U.S. Central Command's area of responsibility includes three battalion headquarters committed on a rotational basis, similar to the pre-Operation Iraqi Freedom Patriot rota-

tions to Southwest Asia. Like many branches, ADA has provided forces to nonstandard missions in Iraq and Afghanistan, such as convoy security, host-nation security force training and detainee operations. The branch has also provided forces to Iraq to execute the counter-rocket, artillery and mortar (C-RAM) mission.

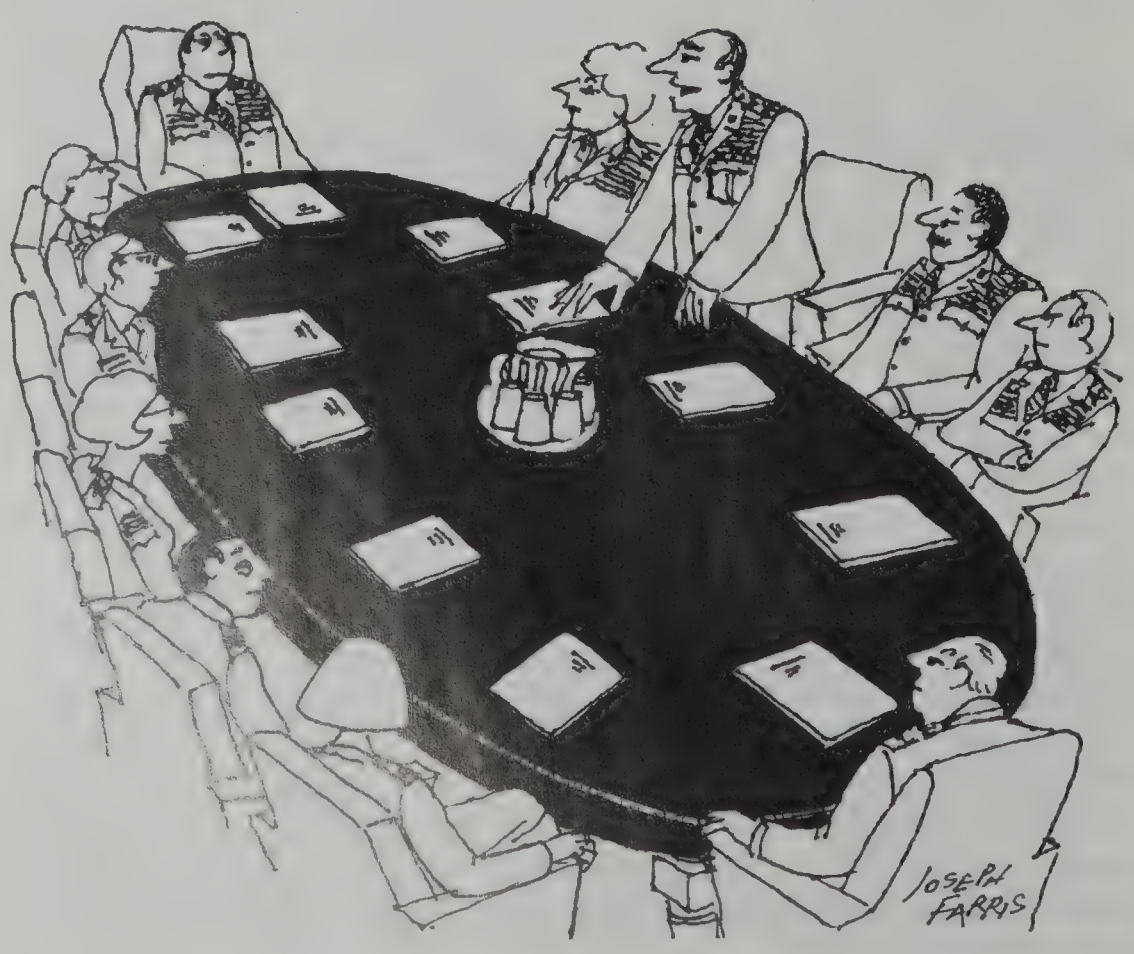
The emerging C-RAM mission will likely develop into a permanent capability. The current C-RAM system is an interim solution to developing an indirect fire protection capability (IFPC) and consists of a sense-and-warn network tied to Phalanx interceptors adapted for use on fixed sites. While clearly a life-saving capability and demonstrative of the Army's adaptive ingenuity, the Phalanx system is a suboptimal solution and is not yet integrated with a doctrinal concept, nor is it a program of record. As U.S. Army Training and Doctrine Command (TRADOC) experiments with new concepts, IFPC is one of several new capabilities requiring deliberate doctrinal work, much like aircraft and armor in the period following World War I. In short, the Army has a capability and now has to decide how best to use it.

Before describing force structure options, it is worth remembering that the term full spectrum operations (FSO) is not a synonym for high-intensity conflict. While the authors of the current FM 3-0 *Operations* clearly stated that FSO refers to the mix of offense, defense and stability inherent in all Army operations, recent use of the abbreviation, especially when used in regard to combat training center (CTC) rotations, equates it with pre-counter-insurgency (COIN) high-intensity conflict CTC rotations. COIN operations are by definition full spectrum operations. A BCT-level attack against an enemy force is also a full spectrum operation, as is a division defense. If every operation is full spectrum, then the Army probably needs to be specific about where along the spectrum of conflict they are training. Ideally, the spectrum of conflict in a training rotation at a CTC will change as the situation and scenario dictate to provide maximum training value. If all operations are full spectrum operations by definition, the Army has not stagnated in FSO. It has, however, been forced to focus on a narrow portion of the spectrum of conflict. Recent doctrinal discussions distinguishing between maneuver operations and wide-area security operations may clarify this debate.

This distinction between FSO and the spectrum of conflict is crucial for force structure deliberations since it is at the heart of the Army's operational doctrine. While some Army capabilities retain utility across the spectrum of conflict, air defense is not necessarily one of them. Assets such as aviation or infantry retain considerable utility across the spectrum of conflict. Patriot and Stinger-based forces have limited utility in a COIN fight, whereas they have great utility in large offensive operations. As a result, the most logical point of departure for force structure discussions is to optimize capabilities for the portion of the spectrum of conflict in which they are most likely to be used.

Patriot forces are optimized for ballistic missile defense, a scenario most logically associated with the operational theme of major combat operations. Simply put, if the missiles are flying then you are definitely in a war. SHORAD forces can operate along a somewhat broader span of the spectrum of conflict since unmanned aircraft systems (UAS) can be employed in a wider range of scenarios, including COIN. The optimal emplacement on the spectrum of conflict for IFPC forces is complicated by the fact that the Army is still developing operational concepts for this capability. The C-RAM system has already been used in COIN, and future IFPC systems may have utility in other types of operations, such as maneuver operations.

The operational concept for IFPC employment in full spectrum operations gets at the heart of the dilemma faced by the ADA branch and the Fires Center of Excellence, Fort Sill, Okla. Given that no new force structure is available, how does the branch repurpose existing forces to support what is likely to become an enduring capability? There are three broad courses of action to address this, each of which needs to be judged on the basis of doctrine and informed by threat.



"Our short-term solution is money. Our long-term solution is more money."

The first course of action is to turn the remaining active component SHORAD force structure into IFPC fire units. This translates to two Avenger battalions and six Avenger batteries from the AMD battalions. Based on the last decade of conflict, this would seem to be the safest choice given the lack of enemy UAS or rotary-wing threats against U.S. forces. One could make a strong argument that template air threats were an artifact of the Cold War and perpetuated by combat training center opposing force doctrine. The same could also be said about armored forces for much of the 1990s after Operation Desert Storm and up to Operation Iraqi Freedom. This course of action also fails to account for the growing UAS and cruise missile threat. Patriot forces in their current configuration do not have the capability to engage small or low-flying unmanned systems. The loss of the SHORAD force would restrict the options available to maneuver commanders if faced by an enemy with UAS capability, such as Iran, especially if that enemy does not employ UAS assets in the same manner as U.S. forces.

The second course of action is to convert a number of Patriot battalions into IFPC battalions while sustaining the existing SHORAD force. While this is likely to be a controversial choice with the branch, now predominantly a

'Once a Soldier ...' Revised

AUSA has just published the seventh edition of its "Once a Soldier ... Always a Soldier" book, which provides biographies on all current members of Congress who served in the Army.

The book was created for the 106th Congress and has been published for each new Congress since that time. It is designed to honor the members' service in the U.S. Army and to recognize the important contributions made to our nation by a unique and distinguished group of American soldiers. Copies are available for purchase in the online store at www.ausa.org.

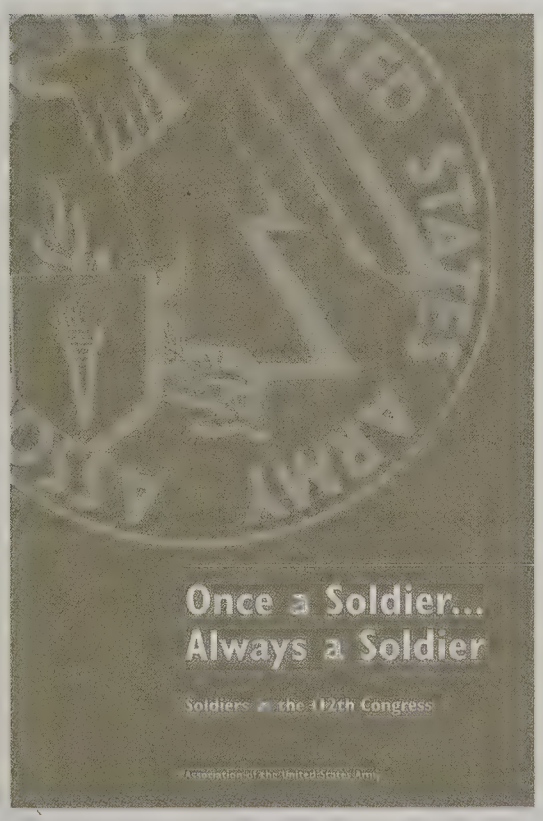
There are 11 new members who are Army veterans. New "member-soldiers" are:

Dan Coats, a Republican from Indiana, who is not new to the Senate, served as one of Indiana's senators from 1989 to 1999. He served in the Army Corps of Engineers from 1966 to 1968. He serves on both the Senate Appropriations Committee's Subcommittee on Defense and its Subcommittee on Military Construction and Veterans Affairs.

Rick Crawford, a Republican from Arkansas, served in the Army from 1985 to 1989 as a bomb disposal technician, reaching the rank of sergeant. He understands military life from the unique point of view of a military "brat," having grown up in an Air Force family.

Chris Gibson is a Republican from New York who retired from active duty as a colonel after 24 years. A veteran of four combat tours in Iraq and deployments to Kosovo and Haiti, he will use his extensive Army experience on the House Armed Services Committee.

Tim Griffin is a Republican also from Arkansas. An Army major, he is currently in his 14th year of service in



the U.S. Army Reserve (USAR). His military service includes assignment in Iraq, and he serves on the House Armed Services Committee.

Joe Heck, a Republican from Nevada, is a medical doctor and a colonel in the USAR who has been deployed to Iraq. He serves on the House Armed Services Committee and the House Permanent Select Committee on Intelligence.

Jeff Landry is a Republican from Louisiana who served 11 years as a sergeant in the Louisiana Army National Guard and saw overseas service in the first Gulf War.

Steven Palazzo, a Republican from Mississippi, is currently serving in the Mississippi Army National Guard and is a Marine Corps veteran of the first Gulf War. He serves on the House Armed Services Committee.

Mike Pompeo, a Republican from Kansas, is a graduate of the U.S. Military Academy (first in his class) and served on active duty for five years with overseas service in Germany.

Steve Stivers, a Republican from Ohio, has served for more than 25 years as a logistician in the Ohio Army National Guard. Currently a lieutenant colonel, he has deployed to Kuwait, Iraq, Qatar and Djibouti.

Allen West, a Republican from Florida, is a retired active duty Army lieutenant colonel with service in both Gulf Wars and Afghanistan. He serves on the House Armed Services Committee and attended the AUSA Winter Meeting, which was located in his congressional district.

Steve Womack is the third new Republican from Arkansas with Army service. He served for 30 years with the Arkansas Army National Guard, retiring in 2009 as a colonel, and was assigned overseas with the Multinational Force and Observers in Sinai, Egypt.

Patriot-based force, it is worth discussing this possibility. The branch has managed all Patriot commitments to date with the existing force structure, and the two additional battalions from GTA have yet to be deployed. In addition, the current force structure set assumes that the forward-based forces will remain in perpetuity. Any force structure discussions will likely be accompanied by additional forward-basing strategies. Of course, any changes to the Patriot force structure would likely be complicated by validated contingency plan requirements and combatant commander theater-engagement strategies (such as U.S. European Command engagements with NATO). This course of action, however, is both feasible and suitable.

The third course of action would be to forgo IFPC in favor of preserving the current force structure. Due to the proven life-saving capability that the counter-rocket, artillery and mortar system has provided in Iraq, this course of action does not seem suitable or acceptable. As TRADOC develops IFPC concepts, it is hard to foresee a scenario in which we would not want to protect our forces from the indirect fire threat. The ability to negate an enemy's indirect fire against maneuver forces has transformational implications. The demand for IFPC is likely to increase over time. Assuming the branch solves the IFPC bill-payer problem in the short term, it is likely to have to address additional IFPC requirements in the future as concepts and experimentation expand the appetite for this capability. In other words, the Air Defense branch and the Fires Center of Excellence will likely have to solve this force structure dilemma in successive iterations.

Like all branches, Air Defense Artillery faces difficult choices on force structure as it attempts to meet current commitments and take advantage of capabilities unavailable until recent years. Decisions must stem first from a sound understanding of doctrine, which rationalizes all combat developments using the doctrine, organization, training, materiel, leadership, personnel and facilities construct. This doctrine must be informed by history, capacity, projected threat and newly emerging capabilities. No matter what the branch recommends to the Army, a capability gap will likely exist after the decision. The acceptance of a capability gap should be a deliberate choice, not the consequence of a choice. Once a gap is accepted, the Army must have a clear-eyed understanding of how to mitigate the gap, not just with the protection capability but across all elements of combat power. □

MAJ Glenn A. Henke is the battalion executive officer for 3rd Battalion, 4th Air Defense Artillery Regiment at Fort Bragg, N.C. He has served in command and staff positions in Germany, Kosovo, Iraq, the National Capital Region, Afghanistan and Fort Bragg.

Airborne Operational Surveillance and Target Acquisition in a Time of Declining Budgets

By LTG Ronald L. Watts
U.S. Army retired

The recent debt-ceiling crisis and the continuing discussions regarding the Department of Defense's share of spending cuts over the next 10 years has once again reminded us of what can happen when some say, "Defense has to take larger cuts." One need only look at history as a reminder of how the armed services could suffer serious degradations in warfighting capabilities. Defense spending may decline $40–50 billion and could decline as much as $100 billion per year for at least the next 10 years. Within DoD there is an ongoing "mini-QDR" that is reviewing service capabilities, roles and missions. One indication of where this review may be focusing is a statement by Army Vice Chief of Staff GEN Peter W. Chiarelli about the redundancy and overlap of intelligence, surveillance and reconnaissance (ISR) programs and his call for the services to "sit down … take a look at what we've got … and see if we have economies of scale." This is clearly a good idea.

New system starts appear unlikely in the new budget environment. DoD may turn more to improving current systems rather than developing new systems to replace existing capabilities. An example is the Joint Surveillance Target Attack Radar System (JSTARS) high-demand, low-density aerial surveillance aircraft (E-8C). During JSTARS production, the Boeing 707 aircraft was completely refurbished and restored to an "almost new" status. The JSTARS fleet has an estimated remaining life of 20 to 30 years or more. It is the newest of all the USAF 707 aircraft fleet. Improving the JSTARS fleet with new engines, enhanced radar and an improved communications suite can be done for a small percentage of the cost of designing, building and fielding a totally new system and can increase the longevity of the current system even further.

Operations over the past decade have proven the critical importance of joint, layered, aerial surveillance and reconnaissance systems to provide the best possible situational awareness and target acquisition. Operational necessity caused the services to field new systems resulting in superb aerial intelligence platforms but with overlapping capabilities. Thus the Army Vice Chief of Staff's desire to evaluate current capabilities is in order.

Unmanned aerial vehicles (UAVs) provide highly detailed imagery in real time directly to soldiers. This "bird's-eye view" is an important advantage our warfighters currently have over our adversaries. While UAV electro-optical (EO) and infrared (IR) sensors provide excellent detail of the areas inside their relatively small field of view,

physics dictates that their fields of regard will remain relatively small. Those who have been deployed to Iraq or Afghanistan tell us that the hard part is often determining where to point the UAV high-resolution sensors with their narrow field of view. JSTARS plays a key role in helping commanders focus UAV sensors in priority areas with its wide-area surveillance capabilities. It seems appropriate for the Army leadership to make clear that the Army is a partner in JSTARS.

The E-8C Joint Surveillance Attack Radar System carries a large AN/APY-7 surveillance radar mounted in a 40-foot-long "canoe" below a modified Boeing 707 aircraft. Unlike the EO/IR "soda straw" sensors on many UAVs, the APY-7 is able to detect and track moving objects on the ground (trucks, tracked vehicles and individuals walking) from more than 150 miles away at altitudes up to approximately 40,000 feet. This capability is known as Ground Moving Target Indicator (GMTI), and JSTARS provides the majority of GMTI capability to deployed U.S. forces. Unlike smaller field-of-view EO and IR sensors, the JSTARS radar is not affected by clouds, smoke or rain. It far surpasses other platforms' wide-area-surveillance capabilities by continuously monitoring and recording movement over a large area (about 50,000 square kilometers).

JSTARS was designed from the outset to support Army operations and carry Army crew members on every mission. It has the ability to rapidly point Army units, other Joint ISR, or attack assets to potential trouble before it happens. In other words, JSTARS is a "force multiplier" that supports warfighters across the spectrum of conflict. As budgets decrease and new programs become unaffordable, the "very broad area" surveillance capability of JSTARS will become even more critical to warfighters.

The Army has deep roots in the JSTARS program stretching back to its inception in the 1980s, although the system is owned and operated by the Air Force. Combat command and operational commanders have testified in recent congressional posture hearings to the importance of JSTARS in helping meet their number-one ISR shortfall—wide-area GMTI. The Air Force, however, has been reluctant to provide upgrades to JSTARS that would improve station time to support ground forces and improve the quality of JSTARS capabilities. These upgrades would provide better data links, wider distribution of sensor data via broadcast, sensor improvements, and so on; add greater time on station (via new engines); and enhance capacity to surge additional platforms to support troops in the fight. Warfighters need these capabilities now and will need them even more as budget pressures, troop withdrawals from Iraq and Afghanistan, and potential flare-ups in hot spots like Korea or Iran stretch U.S. airborne ISR capabilities to the limit. Despite Army equities and service agreements on the JSTARS platform, the Army does not appear to be insisting on upgraded JSTARS capabilities and more dedicated JSTARS support to the warfighters.

In an era when greater efficiencies are needed for warfighting and cost savings are needed by the government and taxpayers, JSTARS is essential to providing the ISR economies of scale GEN Chiarelli is seeking—and at a fraction of the cost of adding new systems or programs. In the spirit of "jointness," it is time to sit down and improve efficiencies and cut costs through JSTARS upgrades, rather than possible new starts, to provide the wide-area surveillance capabilities. Our warfighters need the JSTARS wide-area surveillance to provide situational awareness and to assist in focusing reconnaissance, surveillance, target acquisition assets. □

***LTG Ronald L. Watts**, USA Ret., is the former commander of 1st Infantry Division and VII Corps.*

Observations on Mission Command: Will Our Army Adapt?

By COL Kevin C.M. Benson, Ph.D.
U.S. Army retired
and
LTC Gregory H. Penfield

In February 2011, in Change 1 of Field Manual (FM) 3-0 *Operations*, mission command was introduced as the "warfighting function [that] develops and integrates those activities enabling a commander to balance the art of command and the science of control." Change 1 further defines mission command as "the exercise of authority and direction by the commander using mission orders to enable disciplined initiative within the commander's intent to empower agile and adaptive leaders in the conduct of full spectrum operations. It is commander-led and blends the art of command and the science of control to integrate the warfighting functions to accomplish the mission."

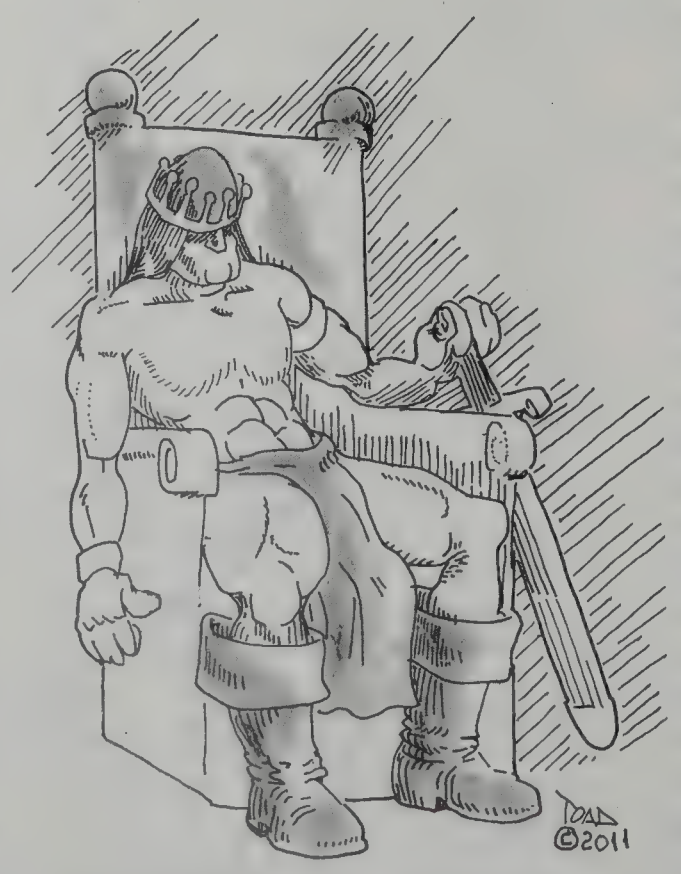
Based on recent experiences within U.S. Army Training and Doctrine Command and in the Iraq area of operations, however, attaining a true degree of mission command acceptance in our Army will remain a "stretch goal." It is doubtful that mission command will be fully accepted and practiced by senior Army leaders as intended in FM 3-0 doctrine. In addition, the joint community is not embracing mission command—a telling sign that it requires further discussion.

Mission command is not a new concept. Our Army tinkered with this concept for decades, using phrases such as "empowering subordinates," "centralized planning" and "decentralized execution" to encourage mission command among its leaders. A passage from the 1962 FM 100-5 is enlightening: "Modern warfare demands prompt action, decentralization, and a high degree of individual initiative."

Our Army asserts that mission command is the correct method of commanding and controlling operations given the complexity of warfare in the 21st century. The purpose of using mission command is to give subordinates the greatest possible freedom of action under the fog and friction associated with 21st-century warfare. Our Army requires commanders and leaders at all echelons who can act with disciplined initiative within the spirit of the commander's intent. Detailed instructions frequently give way to broad direction, which subordinates can interpret and implement according to the situation extant at the time of execution. This is desirable in an Army in which initiative at all levels, from junior tactical leaders to operational and strategic commanders, leads to intent-driven operational and strategic outcomes.

Four major factors may limit the Army's acceptance and implementation of mission command: cultural aversion to risk, the increasingly antiquated Goldwater-Nichols Act, professional military education shortfalls and unintended Army force generation (ARFORGEN) consequences.

Mission command comes with an implied acceptance of risk: to force, to mission and potentially to a personal career. In general, commanders understand these risks; they are inherent in a commander's responsibilities. The necessity to take risks is obvious; the inclination to execute is less so. On the ground, reality will always challenge commanders who wish to conduct operations in mission command style. Each commander may face an area of responsibility with vastly different challenges, precisely the situation and conditions envisioned in the mission command concept. Today's combat environments—where shortcomings on the battlefield, regardless of echelon, become at best front page news and at worst lead to appearances before congressional committees—make every decentralized action a calculated risk.



"Now to foster a culture of change."

The discussion on "The Lost Art of Leadership in Garrison" in the *Army Health Promotion Risk Reduction Suicide Prevention Report 2010* alludes to potential challenges with mission command at home station. The inherent differences in command climate between home station and combat operations may affect mission command execution. Will commanders who exercised mission command in combat by necessity due to geographical dispersion, cultural differences and mission requirements continue to do so at home station? If some commanders tighten the reins of control at home station, will this lead to the perception of a zero defect Army again? How will soldiers, especially our junior leaders, react to micromanagement after being empowered with life-altering decisions in combat? How will they react to continuous scrutiny over mundane but required tasks like Red Cycle, motor stables and quarterly training briefs?

Another potential impediment to successful mission command implementation is the current joint force construct. If our nation is truly facing a period of persistent conflict,

then this requires a review of joint-staff-developed, Goldwater-Nichols-implementing instructions. If the Army is the only service to embrace mission command, incongruities between joint and Army doctrine may lead to dysfunctional joint operations.

A joint level headquarters will most likely be *ad hoc* in nature and responsible for all three levels of war simultaneously. This is certainly true of U.S. Forces-Iraq right now. The reality is that few officers arrive at this level of headquarters with the experience to operate at all three levels simultaneously.

The majority of planners who will write orders to conclude our current campaigns will likely be company-grade and junior-field-grade officers. Most of them will be comfortable at the tactical level and their unit experiences no higher than brigade and below or service equivalent. They will have a strong tendency to use tactical language (with definitive tasks and purposes) when writing joint or operational-level orders. The duality of writing an order containing a combination of mission command and directive tasks in a joint service environment may prove problematic, as we experienced in Iraq.

Compounding this reality is the lack of broad staff college-level education that addresses mission command across the joint services. This places a very high premium on staff and war college education for those leaders who will guide the efforts of these officers. Leader development is *the* priority for the Army Chief of Staff. The three pillars of leader development—education, training and experience—form the basis for instilling mission command. Professional military education, home station training that is reflective of combat and experience garnered through the exercise of mission command will help form the basis of trust required for future conflicts. The program of instruction at Fort Leavenworth, Kan., the U.S. Army War College, and sister service equivalents must educate officers to produce mission command orders as a staff and implement mission command as commanders.

The final potential obstacle is the use of the Army force generation (ARFORGEN) model. Mission command is built on trust and requires that commanders understand each other. The unintended consequence of ARFORGEN and the "patch" chart is a delayed ability to exercise mission command with familiar units and leaders based on trust. Mission command demands that subordinate leaders operate independently within the commander's intent. This requires a level of trust possible only through time and experience with a particular commander or unit. The reality of the modern battlefield should overcome any attempt to be prescriptive, as changing conditions and fog and friction require junior leaders to exercise initiative within the commander's intent. If the most ready division headquarters arrives in a combat zone with some number of subordinate brigades for which the division has not maintained training and readiness oversight, however, then we must expect a rather slow march toward building trust and execution of mission command. The default is commanders issuing prescriptive orders to compensate for this lack of trust.

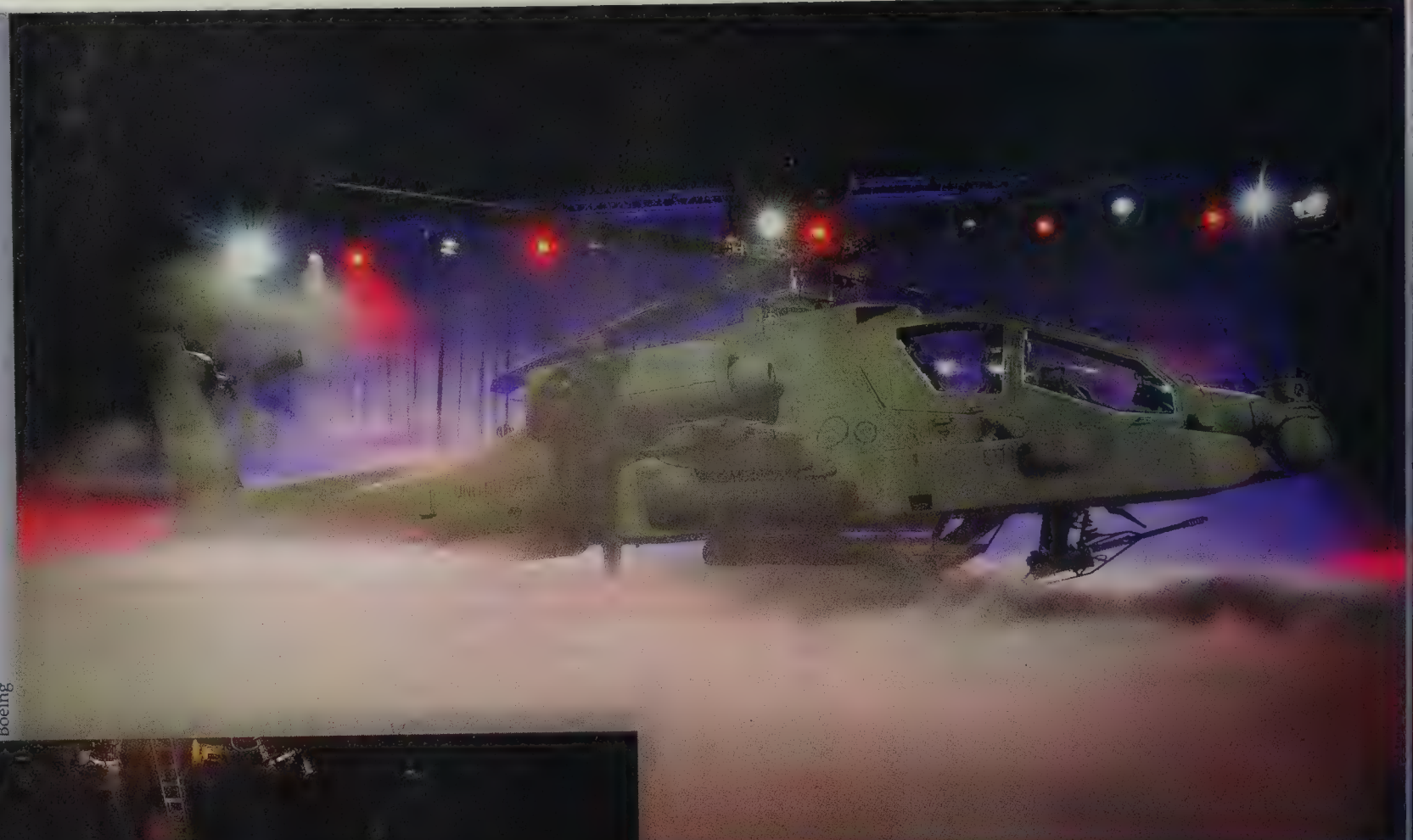
How do we assist in the acceptance of mission command? We must allow commanders to command and underwrite their decisions with equal moral courage in the face of scrutiny by political and media groups. The Army must also demand with equal vigor the execution of mission command in home station operations to replicate the leadership environment expected in combat. Our Army must consider reducing the size of its joint task force staffs to require a reliance on subordinate unit commanders' judgments, which will gradually assist in the acceptance and practice of mission command.

U.S. Forces-Iraq developed an order containing mission style and directive tasks that reflects the reality of a headquarters—operating at the strategic, operational and tactical levels—that controls disparate organizations within a complex operating environment. This ongoing operation must be studied and used to inform revisions within Goldwater-Nichols and refinement of mission command doctrine and curricula.

Our Army must build on the common, shared experiences of military schooling and training that form the basis of trust. Exercise programs must broaden experiences under commands of different leadership styles to the point that our officers can write mission-type orders in doctrinal language that communicates intent across the joint force. In addition, the Army must determine how to facilitate execution of the ARFORGEN process while mitigating impacts to mission command. Every combat training center or predeployment exercise should include training outcomes focused on building trust and executing mission command concepts.

The four factors addressed in this article are by no means all-inclusive, but they are important and must be considered as part of any approach to implement mission command in the Army. The complexities of 21st-century warfare demand a mission command approach. The question is: Will the Army adapt to overcome impediments to mission command or allow mission command to be a stretch goal? □

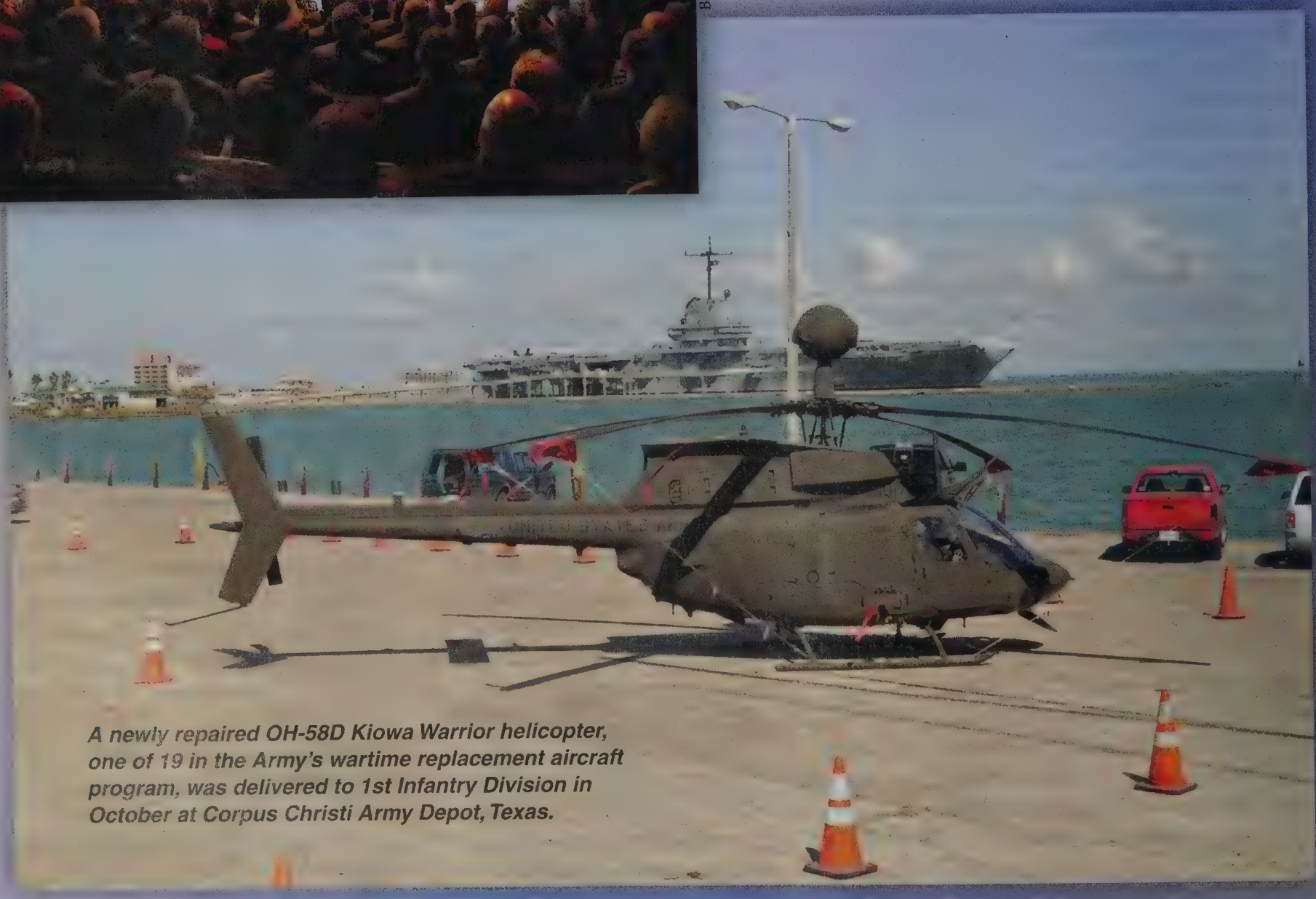
COL Kevin C.M. Benson, Ph.D., *USA Ret., teaches at the University of Foreign Military and Cultural Studies at Fort Leavenworth, Kan. During his 30 years of active duty in the U.S. Army, COL Benson served as the Assistant Chief of Staff, C-5 (Plans), Combined Forces Land Component Command and Third U.S. Army during Operation Iraqi Freedom, and as the director, School of Advanced Military Studies, Fort Leavenworth. A 1977 graduate of the U.S. Military Academy, he has a doctorate in history from the University of Kansas.* ***LTC Gregory H. Penfield*** *is Acting Chief of Staff and G-3 for the U.S. Army Combined Arms Center-Leader Development and Education at Fort Leavenworth, Kan. He has deployed twice to Iraq as the senior future operations planner for Multi-National Corps-Iraq and as a strategist on the U.S. Forces-Iraq J-5 Plans staff.*



Boeing

Boeing

Above, Boeing delivered the first AH-64D Apache Block III multirole attack helicopter to U.S. Army Aviation in November in Mesa, Ariz. The Army's acquisition objective is nearly 700 aircraft, which incorporates 26 new technologies and is an integral element in Army Aviation's modernization strategy. Left, COL Shane Openshaw, U.S. Army Apache project manager, addresses attendees at Boeing's delivery ceremony.



U.S. Army

A newly repaired OH-58D Kiowa Warrior helicopter, one of 19 in the Army's wartime replacement aircraft program, was delivered to 1st Infantry Division in October at Corpus Christi Army Depot, Texas.

Army Aviation Update

By Scott R. Gourley

U.S. Army Aviation reached another significant modernization milestone in November 2011, when Boeing formally delivered the first AH-64D Apache Block III multirole helicopter. Boeing is scheduled to produce 51 AH-64D Apache Block III helicopters for the Army under low-rate initial production with the Army's acquisition objective standing at 690 Apache Block III aircraft.

The Apache Block III incorporates 26 new technologies, including an improved drive system with a new split-torque face gear transmission that increases power capability to 3,400 shaft horsepower. A new composite main rotor blade accommodates that power increase.

Speaking at the conclusion of the delivery ceremonies, MG Tim Crosby, U.S. Army Program Executive Officer, Aviation, said, "We have to think of this in terms of an overall modernization strategy for Army Aviation. This is yet one more accomplishment of that team.

"It's all part of a modernization strategy and a focus within Army Aviation and our Army on two things: giving our soldiers what they need, when they need it, and reducing their burden as they carry the fight to our enemy. This system will significantly enhance our soldiers' ability to do that while reducing their burden of sustainment."

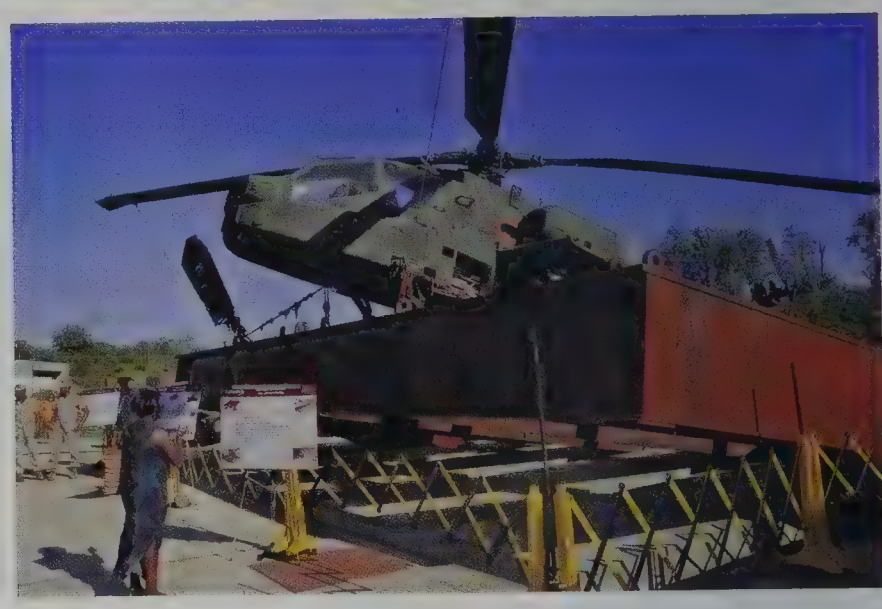
MG Crosby's comments came just one day after another Army Aviation platform milestone, when Bell Helicopter (a

Courtesy photograph

A shipping-and-receiving employee rolls the fuselage of an AH-64D Apache Block III onto the receiving dock as it arrives at Boeing's Mesa, Ariz., facility.

Textron company), in partnership with Corpus Christi Army Depot and the Armed Scout Helicopter Project Management Office, delivered the first OH-58D Kiowa Warrior Wartime Replacement Aircraft to the Army. As the first of a contracted 19 in the Army's wartime replacement aircraft program, the aircraft is representative of many activities currently under way or pending for the OH-58D Kiowa Warrior fleet, which has logged more than 750,000 combat hours and has maintained the "highest operational tempo and readiness rate of any Army helicopter operating in Afghanistan and Iraq," according to Bell.

Together, the two events are indicative of sustainment, performance and modernization activities taking place across the "platform elements" of the Army Aviation fleet. Over the coming months, ARMY Magazine will profile several of these platform activities.



Doug LaFon

An AH-64D Apache Longbow Block III is set into place for tests and evaluations at the Army Research Laboratory in Adelphi, Md.

Equally significant are the supporting aviation systems that span operations across all fleets. While frequently overlooked, these activities are critical to the combat performance of the platform systems. COL Anthony Potts, U.S. Army project manager for aviation systems, refers to his office as "the 'non platform' project management office for Program Executive Office Aviation."

The organizational structure includes four subordinate product office organizations: Aviation Ground Support Equipment (AGSE); Aviation Mission Equipment (AME); Aviation Networks and Mission Planning; and Air Traffic Control. (Although the office formerly included fixed-wing aircraft assets, those products were shifted into a separate Fixed-Wing Project Office that was established in late October.)

Offering an explanation of his subordinate product office activities, COL Potts began, "We provide all AGSE—all the maintainers' equipment—for every aircraft in the U.S. Army. We are … unique in that the other project offices are focused on the specific platforms and those battalions, while we touch every single aviation brigade/unit/detachment in the U.S. Army."

Scott R. Gourley, a freelance writer, is a contributing editor to ARMY.

Representative of the 22 unique aviation items managed by AGSE is the Army's new Standard Aircraft Towing System.

"It sounds simple, right? An aircraft towing system? You would think that's something we have had ever since we had aviation, but we haven't, and it has been a huge success story," COL Potts said. "It was our first competitive, commercial, off-the-shelf major end-item procurement. The guys did a great job—all within less than a year—and significantly reduced the cost from our initial estimate by more than 50 percent. Two years later we are close to completing fielding for the entire U.S. Army.

"We have them all over the world now," he added. "The first unit that we equipped with that system almost immediately got deployment orders to Afghanistan, so we were able to put it into theater and start sustaining it."

One early lesson learned involved the climatic extremes facing tow vehicle operators.

"The guys immediately saw the issue, and we built what we call a crew protection system," COL Potts said. "We had it designed, fabricated, built and tested. The latest towing systems are rolling off the line with that crew protection system, and we have already gone back into the theaters of operation with a retrofit program."

U.S. Army/Sofia Bledsoe

COL Shane Openshaw, Apache helicopters project manager, accepts the log book and keys during the Apache Block III roll-out ceremony at Boeing's Mesa, Ariz., facility. The 1st Battalion, 1st Combat Aviation Brigade, Fort Riley, Kan., will be the first unit equipped with the Block III helicopter.

The organization ensures continued responsiveness through an annual Aviation Ground Support Equipment User Conference, a week-long event that reviews the systems to evaluate current performance and ascertain potential needs.

"It's a two-year cycle," COL Potts explained. "We modify the documents, work with the Army G-8 representative there for the funding, and within two years we are making these rapid modifications to make sure that our soldiers have the latest and greatest in ground support equipment. Ultimately, it comes to the fact that we can have the greatest aircraft in the world, but if we don't provide our maintainers with equally great equipment so they can get out and work on these aircraft and keep them operational, then those aircraft operational readiness rates are going to fall significantly. We believe that our support to these systems is one of the key contributors to the high operational readiness rates that we are experiencing in our combat theaters. Those high operational readiness rates mean that we are helping them generate more combat power on a daily basis.

"Aviation Mission Equipment includes all of our communications, navigation and surveillance equipment," COL Potts said. "That includes all of our Federal Aviation Administration mandates because we don't just fly tactical [missions]. All of our aircraft operate within the national airspace and within international airspace. … What we are doing in some cases is combining a tactical necessity with a domestic reality to comply with law—whether it's domestic or international—concerning use of airspace. So that gives them some unique challenges—tactical and domestic—and they have to comply with both sides. That stretches us into many organizations that have a say as to how our equipment is built."

In addition, while AGSE tends to be a stand-alone product office, multiple links are evident among the activities of AME and the other two product office organizations.

"We were challenged by the Vice Chief of Staff of the Army to more rapidly integrate these new tactical networking waveforms into our aviation fleet so that we can really push the combined arms team and the combined arms fight with some of our new tactical systems," COL Potts said, "and that is both voice and data. Within my AME area I have a Joint Tactical Radio System (JTRS) team that has been working on our JTRS Airborne, Maritime/Fixed (AMF) program, particularly with the Apache. We have two prototype AMF boxes that are out in the Boeing lab at Mesa, Ariz. Right now we are working the integration of that system onto the AH-64D Block III aircraft, which will provide to the Army … more of an expanded joint service capability."

Emphasizing the cooperative environment that exists across myriad Army organizations, he continued, "At the Network Integration Evaluation [NIE 12.1, October–November 2011] we put the Soldier Radio Waveform (SRW)—using Rifleman Radios and Ground Mobile Radios (GMR)—in the Kiowa Warrior. Working with one of my other offices, Aviation Networks and Mission Planning, … we have our first prototypes of what's called an open systems architecture improved-data modem (IDM). By combining the SRW on Rifleman Radio and the open systems architecture IDM we have been able to [speak], run data and see position location within our Kiowa Warrior aircraft over that SRW network.

"We have taken radios and put them in the wings of Shadow Unmanned Aerial Systems," COL Potts added. "And although we are still in the process of optimizing, we have already been able to do a network aerial range extension."

One anecdotal scenario from NIE 12.1 involved a Rifleman Radio integrated into a UH-60 Black Hawk, communicating through a Shadow UAS and talking to a unit on the ground 40 miles away. "By going through the Shadow, the helicopter talked to the unit at over 40 miles on a network radio that is really only designed to have about a 2-kilometer range," COL Potts said.

"My folks have also taken all of these radios and integrated them into a fixed-wing aircraft," he added. "We call it the Fixed-Wing Aerial Tier. … We know that we have been able to pick up the high-capacity networking waveform over the high-band networking radio at ranges in excess of 50 miles, and even at that distance we were still able to push more than 6 megabits of data per second through the system.

"Through our Aviation Networks and Mission Planning we have another system that we are working, called Degraded Visual Environment," he noted. "Between 2002 and 2010 we lost lives flying in very difficult, austere, 'browned out' conditions, as we have aircraft landing in desert areas where they lose situational awareness and are completely engulfed in clouds of dust and sand. So we're working

U.S. Army

Soldiers connect to Operation Enduring Freedom Secret Internet Protocol Router Network during radio-operator training in Kandahar Province, Afghanistan. The AN/PRC-117G waveform radio enhances communication at the tactical edge.

now on a system to basically 'see through' the dust and sand obscuration so that the pilot can maintain situational awareness all the way to the ground, even in these severely degraded visual environments.

"We are looking at that now. We have an operational needs statement that has come down to us from the Pentagon. We are now on contract to build a system for our UH-60 'A' and 'L' models, which are the most vulnerable aircraft—not our more modernized ones. The older models don't have the augmentation and stability and all the flight controls that our newer aircraft have. Some of them don't have the same symbology sets," he said.

Working in cooperation with the Army's air warrior program as well as elements of the special operations community, plans are to begin delivering initial sets into theater in the next 18 months.

Air traffic control activities range from new web-based tools that facilitate access to the Tactical Airspace Integration System to an ongoing effort dubbed Dynamic Airspace Updates.

In explaining the latter, COL Potts acknowledged, "If an aircraft is out flying and we needed to put up a restricted zone—if we had something like an unmanned aircraft system or an artillery strike going out—you have to call these aircraft on the radio and start telling them these coordinates. Now you have one of your pilots head down in the cockpit, writing things out and plotting it on a map. First off, he's not helping his 'stick buddy' anymore by keeping eyes out of the cockpit watching for other traffic or terrain. And most of the time we have found, as we have run exercises on this, that by the time we are able to tell them and they can plot it, they have already violated the restricted airspace."

The new system allows the restricted airspace information to be disseminated as an overlay through the Blue Force Tracker network. "It gets displayed on the pilot's moving map in his cockpit," COL Potts said. "It just shows up, and the pilot gets an alert that he has an airspace change and can look down and see that it's already plotted on his map."

The capability is projected for demonstration during NIE 12.2 in spring 2012.

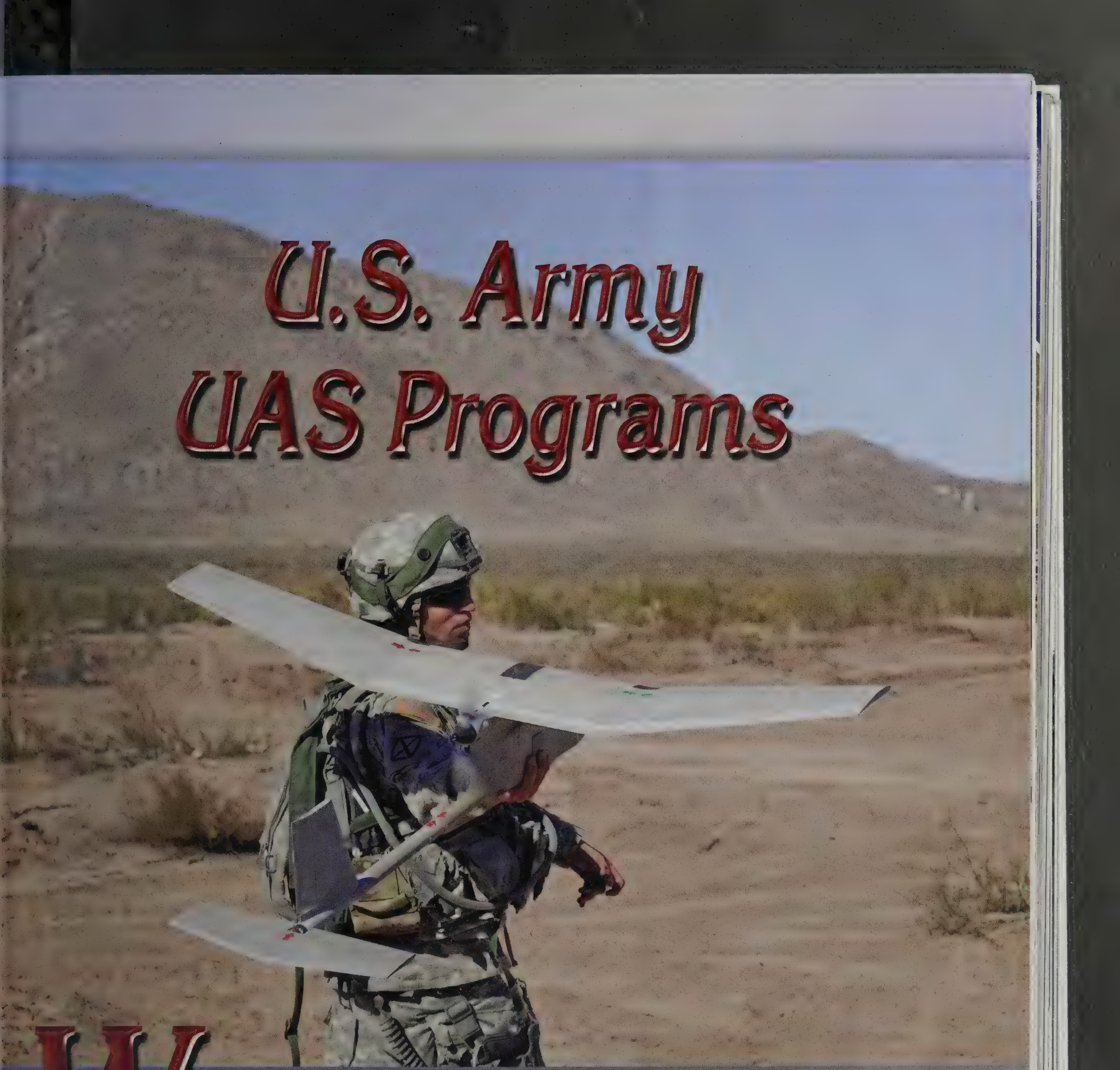
Another recent ATC office activity involves airfield lighting in Afghanistan. "We had some airfields that were very restricted as to when aircraft could get in and what size/types of aircraft could get in there, because they either did or did not have infrared lights; they didn't have the right intensity lights; [or] they didn't have the ability for the pilots to automatically control the lights," COL Potts said. "So our air traffic control team, in coordination with the Logistics Support Facility at Redstone Arsenal in Huntsville, Ala., partnered with Sierra Nevada Corporation and [in late summer 2011] installed three of these systems throughout Afghanistan. It completely changed the types of aircraft that could now get into those airfields and made them basically 24-hour airfields instead of day-only airfields."

Lessons learned in that process are also being incorporated into the Army's new Mobile Tower System (MTS) that is being introduced to replace the obsolescent "7 Alpha" MTS. COL Potts noted that deliveries of the first new MTS should begin by the end of 2012.

"It's about generating combat capability," COL Potts concluded. "We hear all kinds of stories of our great, heroic MEDEVAC pilots being able to launch in terrible weather, get out, pick up critically injured soldiers and use the tactical air traffic control systems that we provide out in the fight to get those soldiers from the battlefield all the way back to the hospital, meeting that critical medical need within 'the golden hour' to save lives. Our guys aren't the MEDEVAC pilots, but they take an enormous amount of pride in being the guys who provide the systems to help them do their jobs and get them home."

Following the November Apache Block III delivery ceremonies, MG Crosby addressed the broad future of Army Aviation modernization, observing, "There may be some who would ask, 'Aren't you ever satisfied?' Well, no, we are not. We are in continuous process improvement. We owe the soldiers the best that we can possibly give them at any time. Anything we can do to minimize their burden, increase their capability and protect them we will continue to do." ★

U.S. Army UAS Programs



With the recent completion of the inaugural Manned/Unmanned Systems Integration Capabilities (MUSIC) demonstration at Dugway Proving Ground, Utah, [See "MUSIC 2011," page 32], planners are already looking toward an anticipated second iteration in the 2013 time frame.

"MUSIC '1' [2011] focused on interoperability," said Tim Owings, former deputy project manager for unmanned aircraft systems (UAS) in the Program Executive Office for Aviation at Redstone Arsenal, Ala. "Some of it is already in

A soldier launches a three-foot-long Raven, the best known Unmanned Aircraft System (UAS), at the Army's Network Integration Evaluation (NIE) 12.1 held at White Sands Missile Range, N.M., last fall.

Text and Photographs
By Scott R. Gourley

A Rifleman Radio integrated into the wing of a Shadow UAS disseminated video to the ground via the Soldier Radio Waveform during a technology demonstration at the NIE.

theater, and some will arrive in the very near future. The next one will likely focus on a series of integration activities—something called fuse—which integrates all the sensor suites demonstrated [at MUSIC 2011] plus things like signals intelligence and synthetic aperture radar—things that are much broader than just the exchange of video. It will also include wide-area aerial surveillance packages and how you exchange information seamlessly with those. It will include [systems] that offer higher levels of autonomy of systems for the exchange of information, as well."

"The intent is that every two years we will showcase exactly what we are doing," he explained, adding that a key justification of the process is "to show off the capabilities and the investments that are being made and the infrastructure that we are placing here."

In addition to the investments in infrastructure, like the newly established Rapid Integration and Acceptance Center (RIAC) at Dugway Proving Ground, the Army continues to expand its platform investments and system planning across the UAS spectrum.

The best-known UAS system at "the small end" of the Army spectrum is the RQ-11B Raven (length 3 feet/wingspan 4.5 feet). First fielded in 2006, the hand-launched Raven is the Army's program of record for providing the lowest elements of the tactical force with dedicated aerial reconnaissance and surveillance.

Platform capabilities may soon be expanding through the reported development of a miniature gimbaled payload that would enhance reconnaissance and surveillance as well as a developmental communications package that would allow Raven to function as a temporary radio relay node.

The latter capability, dubbed Raven UAS Soldier Radio Waveform (SRW) aerial tier support, was explored during the Army's recent Network Integration Evaluation (NIE) 12.1 at White Sands Missile Range, N.M. (late October–mid-November 2011). Described as "a conceptual demonstration for edge units to establish an aerial tier range extension in the most forward edge networks," the Raven SRW relay capability replaces the current nose reconnaissance package with a program manager (PM) handheld, manpack and small form-fit (HMS) 'A' radio to extend the range of internal company or platoon networks.

PM Small UAS developed the capability demonstration for NIE 12.1 in conjunction with AeroVironment, manufacturer of the Raven, and General Dynamics, manufacturer of the HMS 'A' radio.

Another small hand-launched system entering Army inventories is the AeroVironment Puma (length 4.6 feet/wingspan 9.2 feet). Although not a program of record, the slightly larger Puma (13 pounds for Puma vs. 4.2 pounds for Raven) provides a gimbaled payload option that supports organic reconnaissance requirements of battalion-and-below maneuver elements. More than 100 Puma systems have already been purchased and are being placed into theater, where they are initially directed toward route reconnaissance by route-clearance teams.

The Army is also looking at a UAS option that would be even smaller than the Raven. Speaking at the October 2011 AUSA Annual Meeting and Exposition, COL Robert Sova, U.S. Army Training and Doctrine Command (TRADOC) capability manager for UAS, noted the ongoing preparation of a new capability production document (CPD) for a "family of small UAS."

COL Sova said that the CPD would likely include "something for that small team, that section, that squad, that individual that gives a true micro-capability in the 1 to 2 pound range ... . That's what we're going for. It really is a money issue right now that we continue to work with our G-8 folks to make affordable. It is going to happen. It's just a matter of time as we work through these budget issues."

Moving up the size spectrum, the RQ-7B Shadow 200 UAS (length 11.8 feet/wingspan 20.4 feet) provides maneuver commanders with a near real-time, highly accurate, sustainable capability for over-the-horizon reconnaissance, surveillance and target acquisition (RSTA).

In addition to the re-wing program and the addition of

Scott R. Gourley, a freelance writer, is a contributing editor to ARMY.

A concept prototype for a new radio relay package for the Raven was evaluated at NIE 12.1. Called the Raven UAS Soldier Radio Waveform aerial tier support, it replaces the current nose reconnaissance package.

communications relay packages, efforts are under way to "weaponize" Shadow in support of Marine Corps requirements. (Army manages Shadow on behalf of both Army and Marine Corps users.)

While the Army has no similar plans to weaponize Shadow, COL Sova used the AUSA Annual Meeting and Exposition briefing venue to acknowledge, "There has been a discussion about the Army weaponizing Shadow for a long time. We work with our Marine brethren, and with the re-wing effort [increasing Shadow wingspan from 14 feet to 20 feet] we put hard points on the wings that allow 25 pounds on the wing stores. The Marine Corps definitely wants to weaponize it, and we'll be there in support."

Referring to the displacement of some manned platforms by UAS in the Army's new full spectrum combat aviation brigades (CAB), dropping the number of manned Kiowa Warrior platoons down to seven through the introduction of two Shadow platoons with four aircraft each, he added, "Now that we have replaced some of those manned aircraft with unmanned aircraft [in the full spectrum CAB], the discussion is back on the table. We have said, 'When the Army makes the decision to do that, then we certainly are there and capable of doing it.' So we are taking a hard look at it. As we go forward, we may change … We're in line, as we team with the Marines, to be able to do that if the Army makes the decision to weaponize something smaller than our Gray Eagle."

The MQ-5B Hunter (length 23 feet/wingspan 34.25 feet) UAS is used in support of the Army aerial exploitation battalion for RSTA. Supporting theater conflicts since 1999, Hunter is the Army's longest-serving corps/division-level UAS. According to Army program representatives, Hunter's enhanced imaging system allows commanders to detect, identify and track hostile activity and targets for external weapons systems or maneuvers and battle damage assessment.

The largest end of the Army's UAS fleet-size spectrum is occupied by the MQ-1C Gray Eagle (length 28 feet, wing span 56 feet), manufactured by General Atomics Aeronautical Systems.

COL Timothy Baxter, U.S. Army project manager for UAS, used AUSA Annual Meeting and Exposition briefings to highlight two upcoming milestones for the Army's Gray Eagle. The first is a planned initial operational test and evaluation (IOT&E) in August at the National Training Center, Fort Irwin, Calif. The second milestone will be the first unit deployed—similar to earlier quick reaction capability (QRC) elements—in February.

According to COL Baxter, the "full up" Gray Eagle company will include 12 aircraft and will be deployed in support of forces in Afghanistan.

In addition to the pending first unit deployed, the Army has fielded two QRC sets of Gray Eagle into theaters, with four aircraft and two ground control stations in each set: QRC 1 fielded in Iraq and QRC 2 fielded in Afghanistan.

Speaking at the April 2011 Army Aviation Association of America Annual Professional Forum and Exhibition in Nashville, Tenn., LTC Kevin Messer, U.S. Army product manager for Gray Eagle, noted that the QRCs were flying a total of more than 21 hours per day.

Noting the ability of the QRC aircraft to deliver Hellfire missiles, LTC Messer said, "For QRC 2, we have already fired in anger, and we have destroyed some of the enemy. So we had 'a first.' We had a Gray Eagle up there, we lazed/self-designated and killed an enemy. Then we lazed another target for an A-10, and it dropped something onto [the target] and also took out the enemy. So we are weapons capable."

Wrapping up the UAS briefings at the October 2011 AUSA Annual Meeting and Exposition, COL Sova emphasized the contributions of UAS systems on today's battlefields. "You can ask all warfighting commanders out there today—and it doesn't matter if it's from platoon level up to division level—and they will tell you that unmanned aircraft systems and unmanned systems have changed the way that we fight," he said. "They have changed the way that we fight for the good. They are saving lives. They are saving equipment. … They are going to be around for a while." ★

MUSIC 2011

Text and Photographs
By Scott R. Gourley

Among the unmanned aircraft systems (UAS) exhibited at the 2011 Manned/Unmanned Systems Integration Capability (MUSIC) exercise at Dugway Proving Ground, Utah, in September were the Gray Eagle (above) and the RQ-7B Shadow (below), which, along with the Hunter (not shown), have been flown simultaneously from the same cockpit with the same hardware and software.

One of the milestone events in Army Aviation over the past year was the Manned/Unmanned Systems Integration Capability (MUSIC) exercise, held at Dugway Proving Ground, Utah, in mid-September 2011.

Stated exercise objectives included the demonstration of interoperability and system integration among Army Aviation assets "in accordance with Project Manager, Unmanned Aircraft Systems (PMUAS) Interoperability Profile (IOP) version set 2.0." This set includes the manned/unmanned integration capabilities slated for fielding in Capability Set (CS) 13–14. (This is the same Capability Set being explored at White Sands Missile Range under Network Integration Evaluation (NIE) 12.1 in October–November 2011 and 12.2 in Spring of 2012.)

According to Ed Gozdur, deputy product manager for common systems integration and a lead planner for the MUSIC demonstration, in the past a considerable amount of Army manned/unmanned interoperability activities took place in laboratory settings and simulation environments.

The Universal Ground Control Station (UGCS) allows one controller to fly various UAS as well as direct video reconnaissance from manned aircraft.

"Out here at Dugway we're actually getting to fly things," he said, "because sometimes things work in the lab that might not work out here. But that hasn't been the case, and we are very proud of that fact."

Identifying what he called "a few historic moments," Gozdur pointed to the Universal Ground Control Station (UGCS), noting, "For the first time, a week ago, we flew 'live' Shadow, Hunter and Gray Eagle from the same cockpit with the same software and the same hardware."

Pausing briefly to allow attendees to focus on the launch of a nearby RQ-7B Shadow, he continued, "The second historical thing was that with the UGCS we had the universal operator—one person flying all three airplanes. We brought pilots and engineers out here to determine what skills were needed to create that universal operator. What does he have to do better? How can we integrate that operator into the schoolhouse environment? What kind of training does he need? One of the outcomes of this exercise will be an assessment of how we implement that universal operator and get him trained to fly all three airplanes.

The Triclops payload for Gray Eagle maintains a Raytheon Common Sensor Payload under the aircraft nose with two additional sensors under the wings.

"The other thing we did for the first time involved the One System Remote Video Terminal [OSRVT]," he said. "We added 'bidirectional' capability. Now, in a tactical operations center near the tactical edge, a soldier or a commander can take control of the UAS payload and move it exactly where he wants to watch. The pilot in command of the UAS is still the pilot in command, but now the commander at the tactical edge can get just the information he needs.

"The last thing I want to highlight is the manned/unmanned teaming," he said. "Today we are passing video and intel from platform to platform. We are increasing the flexibility of that commander; increasing the information to both the manned platform in the air and the guys on the ground; and it's allowing commanders to make tactical decisions that they could never make before—not without that kind of information."

Scott R. Gourley, a freelance writer, is a contributing editor to ARMY.

Against a background of sequential takeoffs by MQ-1C Gray Eagle, MQ-5B Hunter and hand-launched RQ-11B Raven, COL Timothy Baxter, U.S. Army PMUAS, introduced attendees to the newly established Unmanned Aircraft Systems Rapid Integration and Acceptance Center (RIAC) at Dugway Proving Ground.

"This represents a single place where we, within the Army, are able to take our unmanned aircraft systems and work with our manned aircraft systems at a single location of interoperability and integration issues. It's right here," COL Baxter said.

"Within the Army and on our battlefields, the UAS has become the … critical link that brings together our aviation community, our intelligence community, our fires community, our maneuver community and our communications community—all working towards a common goal," he explained. "What you are witnessing here today is the result of unprecedented cooperation between numerous defense contractors and the government team. Frankly, it is some-

thing in my 27 years of service that I have not seen on any other program: absolute cooperation, all working towards a common goal, which is to demonstrate this interoperability capability."

Tim Owings, a MUSIC architect and former deputy PMUAS who left this job in October 2011, said, "We've been at this for five long years. We set out to provide seamless integration, a common operating picture and manned/unmanned teaming as it's never been done before. Finally, there is the aspect of universal command and control. We are showcasing that entire package here at MUSIC in a way that I think is going to really resonate."

A mini-UGCS displayed at MUSIC is designed to control a sensor package on the Gray Eagle.

Reviewing the milestones leading to the MUSIC demonstration, Owings said, "In 2005 we established a vision for what we wanted not just Army unmanned aircraft systems to be but what we wanted unmanned aircraft systems' influence on the Army to be. In 2006 we stood up an organization called Common Systems Integration, and LTC James Kennedy and Ed Gozdur are entrusted with that organization. The organization is unique in that it is intended not to manage a platform *per se* but to provide horizontal integration across everything that we do.

"What happened beyond 2006 is that we set forward what I refer to as a drumbeat of success," Owings added. "We set a vision, and we began working through some issues. And at first the drumbeat was slow. Then, slowly, you have one success; that builds on another success; that changes a mind-set; that changes someone; that changes a company; and the drumbeat speeds up."

Following the 2006 creation of the Common Systems Integration organization, the next significant event was the 2007 release of the OSRVT product, as previously discussed by Ed Gozdur.

"It's what I call the cable box for the tactical soldier," Owings said. "It gives the ability to dial in a stream of video anywhere you are and receive that video at your laptop computer.

"Then, around 2008, we worked Apache MUM [manned/unmanned], putting that same OSRVT capability into the cockpits of the Apache. At the time there was really a cultural relationship in that issue—it was almost manned *versus* unmanned. Today that has fundamentally changed, and it happened because of a lot of great work between our office, the Apache office and a lot of great operators showcasing what those systems can do.

"We ran into a problem about that same time in 2008," he acknowledged. "We began to realize that we couldn't operate 15 different training sites and 15 different integration sites and still say that we were going to live and breathe interoperability. So we established this Rapid Integration and Acceptance Center (RIAC) facility in 2009."

The Dugway site was selected from a list of three finalists that included Yuma Proving Ground, Ariz., and Fort Huachuca, Ariz.

"These are outstanding facilities," Owings assessed, referring to the RIAC taking shape at Dugway Proving Ground. "There are no native aircraft at this facility other than the ones that we bring here as unmanned aircraft systems. None of the hangars existed in 2009. We plan a complete complex that is going to get much bigger with a depot facility in the back. This place is going to be fundamentally changing, but more importantly it provides us with a single location for doing interoperability activities in a very, very rapid fashion."

Additional "drumbeat" activities highlighted by Owings included 2010 manned/unmanned integration activities focused on Kiowa Warrior as well as the current fielding of the UGCS with the Shadow system.

"We will be fielding it soon with the Gray Eagle system," he said. "It enables that single operator and provides that single software load so that when we make a change or we integrate that one payload package we will get the efficiency benefits of being able to translate that across the systems that we manage."

The accelerating 2011 drumbeat marked the development of a mini-UGCS and the integration of a new digital data link in the Raven and Puma UASs.

Owings said that the combination of capabilities prompted realization that "we were wasting a lot of assets if we didn't figure out a way to make these mini-UGCSs

One of the two Raytheon DAS-2 sensors under a wing of the Gray Eagle.

able to receive the video from the larger platforms. So—literally—in a restaurant one night on the back of a napkin we created what we call Triclops. We said, 'Why don't we make the mini-UGCS able to control a sensor package on the Gray Eagle, separate from the native sensor, and why don't we have an additional sensor that we can hand off to the Apache operators?'"

As currently configured, Triclops maintains the Raytheon AN/AAS-53 Common Sensor Payload (CSP) under the nose of Gray Eagle while adding two additional Raytheon DAS-2 sensors—one under each wing. A tactical scenario was then presented to emphasize the seamless integration of the emerging UAS capabilities while operating in conjunction with manned AH-64D Block II Apache and OH-58D Kiowa Warrior platforms.

With the Gray Eagle Triclops sensor, as an example, the scenario featured the primary AN/AAS-53 CSP under the aircraft nose and operated via a Ku-Band tactical common data link from AAI's Universal Ground Control Station. Simultaneously, the two additional Raytheon DAS-2 sensors under the wings were operated separately by soldiers on the ground using a bidirectional OSRVT and AeroVironment's Mini-Universal GCS.

Other aspects of manned/unmanned teaming demonstrated in the scenario included surveillance hand off between Raven and Shadow; hand over of Shadow payload control from UGCS to OSRVT; complementary surveillance of a semi-hidden target between Shadow's "top down" view and Apache's "low angle" view; OSRVT operator receiving Apache payload video; target reconnaissance hand off from Shadow to Gray Eagle; target reconnaissance hand off from Gray Eagle to Puma; retransmission of Hunter overwatch video of new target to Kiowa Warrior; OSRVT operator receiving Kiowa Warrior mast mounted sight video; and Kiowa Warrior live-fire rocket attack during which OSRVT observed the attack from the helicopter's point of view through an onboard sensor video at the same time that the UGCS operator observed the target attack from Hunter's payload camera.

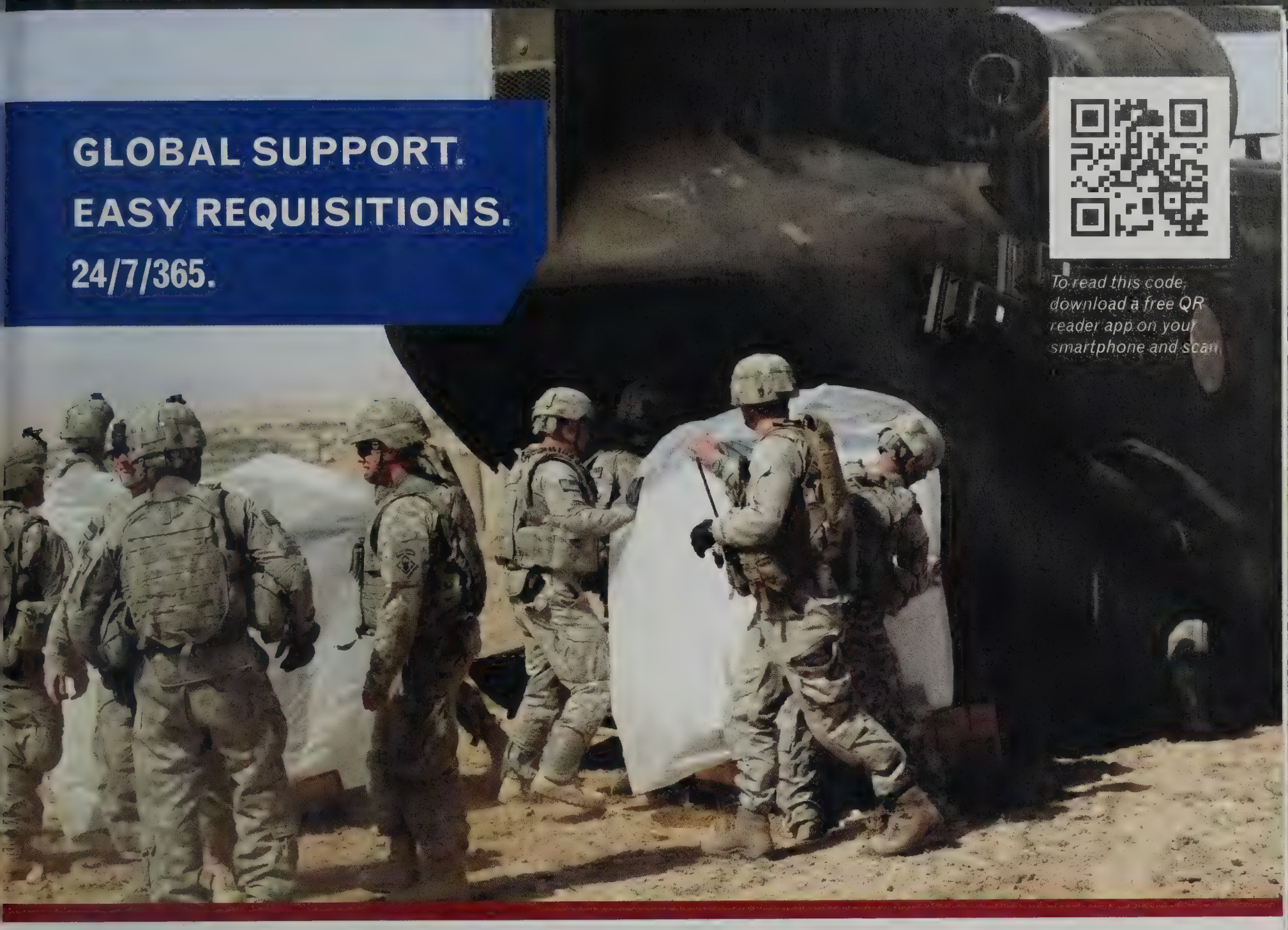
Owings concluded by emphasizing the importance of the individuals who have been focused on this level of integration over the past few years.

"The products don't make themselves," he said. "The real cultural shift in terms of the vision that was established and in terms of the execution of that vision had to do with the people involved. It had to do with government guys working together between project offices in ways we had never done before. Probably even more difficult was the fact that it took multiple companies working together, cooperating and trusting each other in ways they had never done before.

"What you are seeing here is the culmination of a few things," he said. "The first is a vision that set the tone for the future. The second is a cultural shift that allowed a vision to take hold. And finally, this is a success story that is going to live for a long time. What we are showing here today is going to shape the future of the Army for a long while."

Long-term service planning envisions subsequent MUSIC exercises "every couple of years," with the additional goal of introducing joint service involvement in the events. ★

MUSIC demonstrated a target reconnaissance hand off from the Shadow (foreground) to the Gray Eagle.



To read this code, download a free QR reader app on your smartphone and scan.

Your Mission. Your Way.

GSA Global Supply™

GSA Global Supply has supported military customers around the world since 1949. We ship tools, office supplies, safety gear and more into the Middle East, Europe, Asia and beyond. We seamlessly support your requisition via MILSTRIP or Government Purchase Card. Our deployed staff in Afghanistan and Kuwait works side by side with DLA's Deployment Support Team to provide training and expedite the flow of needed supplies. GSA's mission is to help you focus on yours.

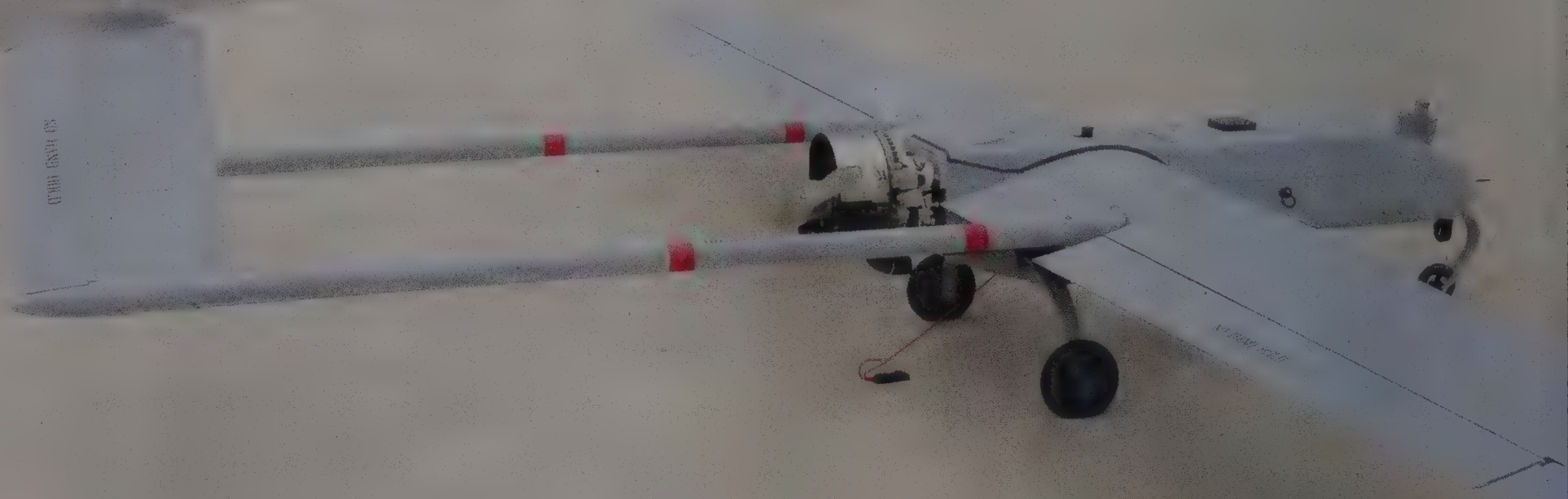
For more information, visit **www.GSAglobalsupply.gsa.gov** or call **1.800.525.8027.**

We Accept GSA SmartPay® 2

Our customer service hours have been extended! Status updates, billing, and information available 24/5 (Sunday, 9P EST – Friday, 9:30P EST) at **1.800.488.3111**

U.S. General Services Administration

UAS Project Office Undergoes



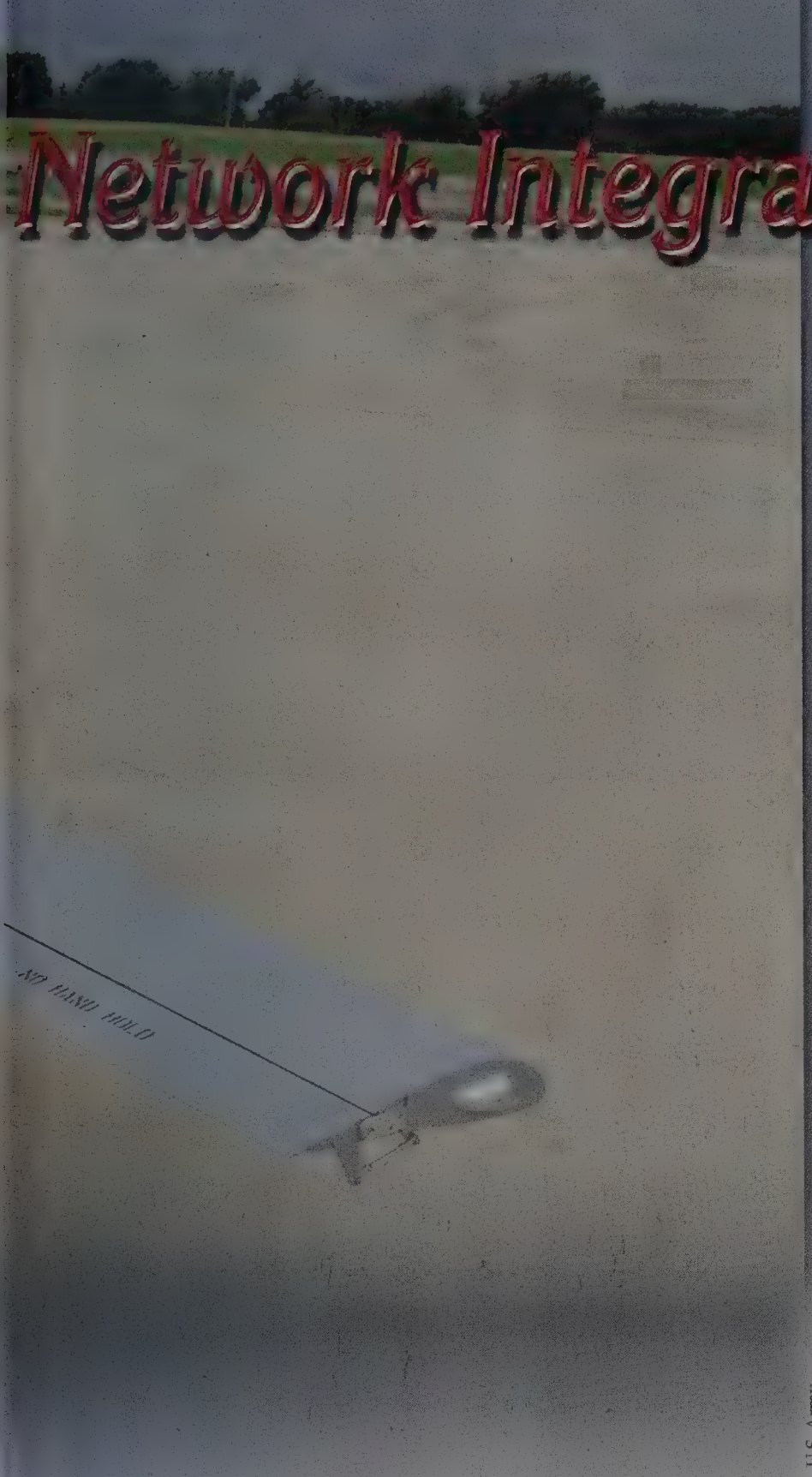
RQ-7B Shadow Unmanned Aircraft System (UAS)

The Army's Unmanned Aircraft Systems (UAS) Project Office (PO) is one of the Project Manager Offices under the Program Executive Office, Aviation and is organized to provide a comprehensive management and technical approach to the life cycle of the overall Army UAS fleet. This approach includes development, acquisition, testing, integration and logistics requirements for the Army's unmanned aircraft fleet. UAS directly supports the core mission of Army tactical commanders by providing near-real time, highly accurate reconnaissance, surveillance and target acquisition (RSTA).

Last fall, UAS PO participated in the Network Integration Evaluation (NIE) 12.1, which is designed to increase combat readiness and effectiveness. The second of the semi-annual field exercises evaluates deliberate and rapid acquisition solutions and integrates and matures the Army's tactical network. The first generation of Army UAS focused on building the core of the program and increasing reliability. The second generation focused on mission acceptance and expansion. The third generation is about autonomy, smart machines and network capabilities whereby machines provide the information and humans make the life-and-death actionable decisions.

Traditionally serving in RSTA roles, UAS has expanded its mission to include manned/unmanned teaming (MUMT), interoperability and aerial communications relay. Unmanned aircraft have become the critical link that ties together the Army's aviation, intelligence, communications and maneuver communities. With this newfound notoriety comes great responsibility, requiring a continued diligence in providing our soldiers the most technologically superior UAS equipment in the world. Participation in NIE 12.1 provided the opportunity to test out new technologies as

Network Integration Evaluation



U.S. Army

well as refine those currently fielded to our forward-deployed forces.

UAS PO continues to modernize the Army's UAS fleet from the inside out, diligently working with industry partners to develop and install cutting-edge unmanned aircraft technologies. As described on page 33, UAS PO conducted a large-scale exercise, Manned Unmanned Systems Integration Capability (MUSIC), to prove technologies that are thought to be ready for fielding, such as MUMT capabilities, as well as run through interoperability profiles (IOP) designed for the express mission of handing off controls from unmanned operators to manned pilots. The technology piece that allows this transference of control is the One System Remote Video Terminal (OSRVT).

One example of the UAS Project Office's NIE participation has come in the form of providing OSRVT systems support and training to units operating in the exercise. NIE

By COL Timothy Baxter

has become a proving ground for new concepts and discovery of gaps in current capabilities. To that end, OSRVT has been integrated into the NIE not only to provide soldiers on the ground with the existing capability to receive UAS video/telemetry for improved situational awareness but also to evaluate future OSRVT logistics and technical concepts.

In June 2011, the Department of the Army designated OSRVT as an official program of record (POR). As a part of the POR process, the OSRVT will be trained/issued to Army units per a predefined fielding structure (as opposed to the previous wartime method of in-theater distribution based on urgent soldier needs). The UAS PO has used the NIE as a pilot program for this new structure by fielding a POR quantity of 18 OSRVT systems to an NIE brigade combat team (BCT) and providing training to the unit as the equipment was issued. UAS PO provided an initial training team and a full-time field service representative to ensure that the troops have the support they need to accomplish their mission. The training team provided on-site training to 53 soldiers participating in the NIE.

Technically, the NIE is being used to evaluate the existing network output capabilities of the OSRVT and gather requirements for potential future enhancements. The systems have been placed in tactical operations centers of the mine resistant armor protected ground vehicle. With OSRVT, soldiers receive critical information about the location and composition of potential threats as full-motion video streamed from an unmanned aircraft. With this information, soldiers gain a visual reference of where the target is in relation to their position. In addition, the OSRVT can be utilized in a limited manner to stream situational awareness information across the network to other troops that lack the benefits of OSRVT. NIE's use of the OSRVT in this manner as a receive/dissemination node should provide beneficial feedback for future enhancements that expand its benefits to the forward-deployed forces.

One of the key elements in the Army's network modernization plan is the ability to dramatically extend the range of wireless networks using unmanned aircraft. In support of this, a Raven-based communications relay was implemented as a collaborative effort between AeroVironment, General Dynamics C4 Systems and UAS PO. With support from Program Executive Office Integration, this technology was evaluated for its ability to enhance and strengthen the network connectivity of the company commander and those of subordinate rank.

U.S. Army

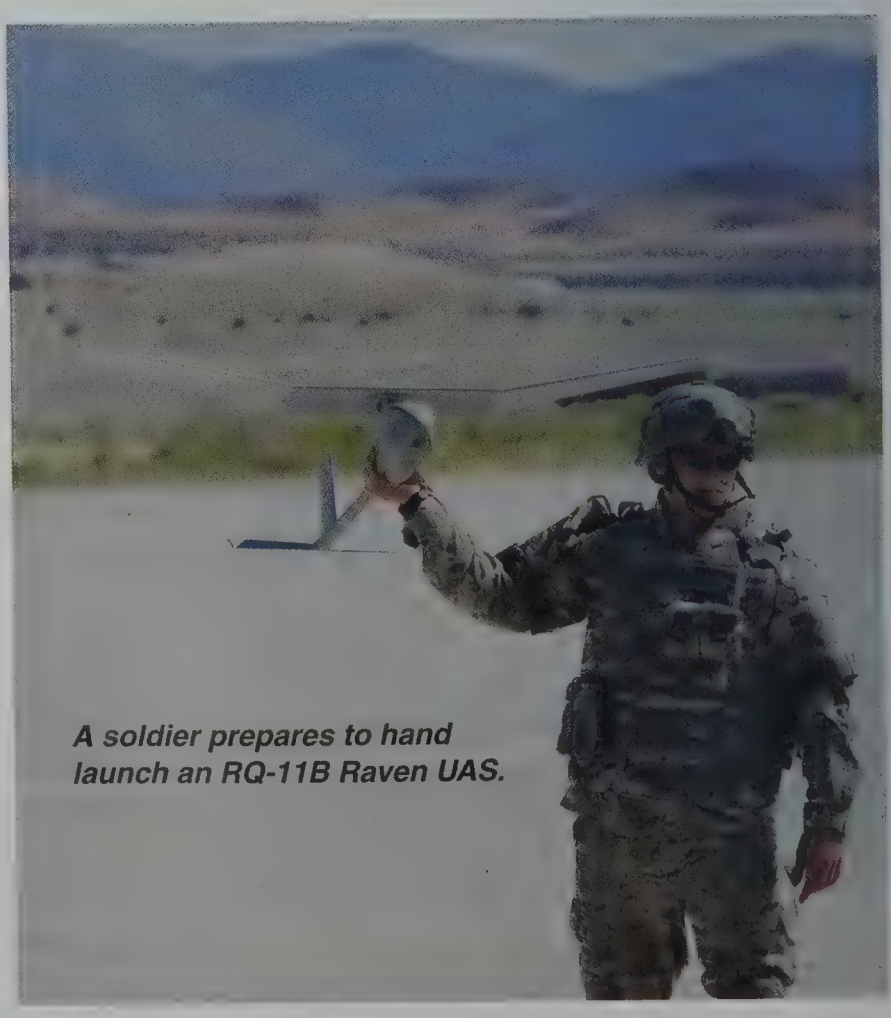
A soldier receives live video feed via the One System Remote Video Terminal, a new and recently tested technology that allows the transference of control from unmanned operators to manned pilots.

The Raven UAS by AeroVironment and Joint Tactical Radio System's handheld, manpack and small form-fit (JTRS HMS) radio, by General Dynamics C4 Systems, were integrated and flown in support of missions at NIE 12.1. The Raven, a hand-launched, back-packable, small UAS, was equipped with a JTRS HMS communications payload. The small size of JTRS HMS radio and extraordinary advances in wireless network communications enabled by the Soldier Radio Waveform (SRW) made this possible. SRW is a mobile ad hoc networking waveform that allows users to communicate beyond the normal constraints of line-of-sight radios by creating, in this case, airborne network nodes. Early results indicate that tripling the range of the standard ground-to-ground communications link is quickly achievable. Given that there are hundreds of Raven systems currently deployed by the U.S. Army in theater, adding an HMS radio to the Raven could put it well on its way to providing mission-critical communications and network information right down to the dismounted infantry squad.

Supporting the NIE 12.1 is the 2nd BCT, 1st Armored Division (AD). Organic to the 2/1 AD is a platoon of Shadow UAS, which is used primarily for RSTA capabilities in standard configuration but for NIE 12.1 was configured to serve as an aerial communications relay and to provide UAS video to the dismounted soldier. The communications relay radios normally used in the air vehicle to perform single-channel ground and airborne radio system (SINCGARS) retransmission were replaced with the PRC 154 Rifleman Radio, which can provide "network thickening" of the SRW for ground units. Using the Shadow as communication relay node, fitted with components capable of relaying/routing the SRW, can extend ground communications. The range extension is used to increase the range of the terrestrial network as well as to provide command-and-control messaging between supported units and the UAS operators.

In addition to the range extension capability, one of the radios in the Shadow air vehicle was used to disseminate video via SRW. The video was received on the ground using a Rifleman Radio attached to an android tablet running a video player. This was performed as a technology demonstration and was not employed by the soldiers. In future NIEs, this could be employed to demonstrate direct dissemination of video to the dismounted soldier.

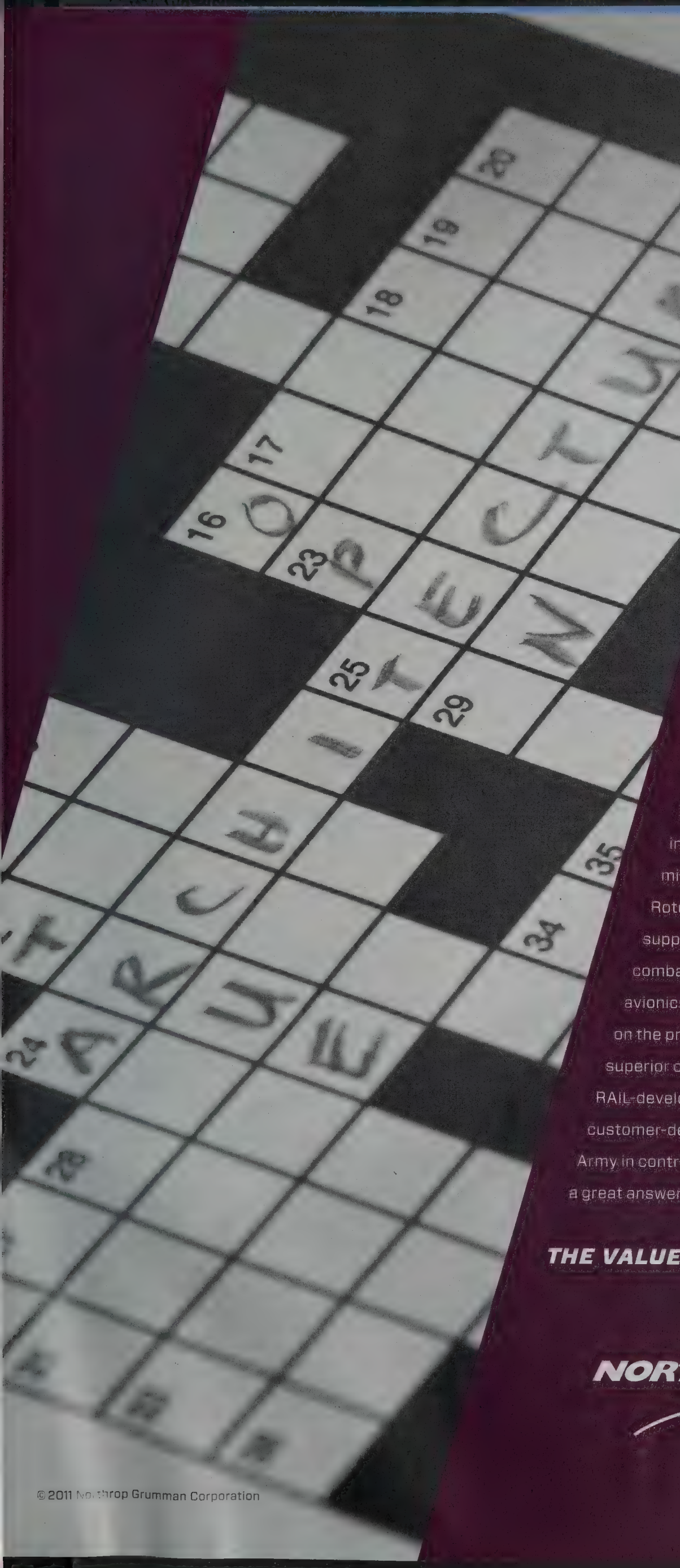
According to Todd Smith, Deputy Product Manager, Ground Maneuvers Product Office, UAS PO, "Shadow's primary mission has long been reconnaissance and surveillance. NIE allows us to demonstrate the value of Shadow as a communications relay asset and the ability to experiment with data communications over JTRS out to supported ground units." Shadow testing is facilitating the move from legacy, analog waveforms such as frequency modulation/SINCGARS to digital waveforms such as SRW. This will allow and support the transfer of data from the sensor to the soldier, networking our units through an aerial layer. ★



U.S. Army

A soldier prepares to hand launch an RQ-11B Raven UAS.

COL Timothy Baxter is the U.S. Army project manager for unmanned aircraft systems.



ARMY RAIL

THE VALUE OF *SOLVING COST AND CAPABILITY QUESTIONS.*

Meeting the U.S. Army's needs for future integrated-cockpit capability is critical to mission success. The Northrop Grumman Rotorcraft Avionics Innovation Lab (RAIL) supports the rapid and agile development of combat-proven advanced cockpits with integrated avionics architectures. The RAIL test bed is built on the principle of truly open architecture to deliver superior combat effectiveness and cost efficiency. RAIL-developed cockpits are scalable, receptive to customer-defined apps, and interoperable — putting the Army in control of the future. Northrop Grumman RAIL a great answer to multiple questions.

THE VALUE OF PERFORMANCE.

NORTHROP GRUMMAN

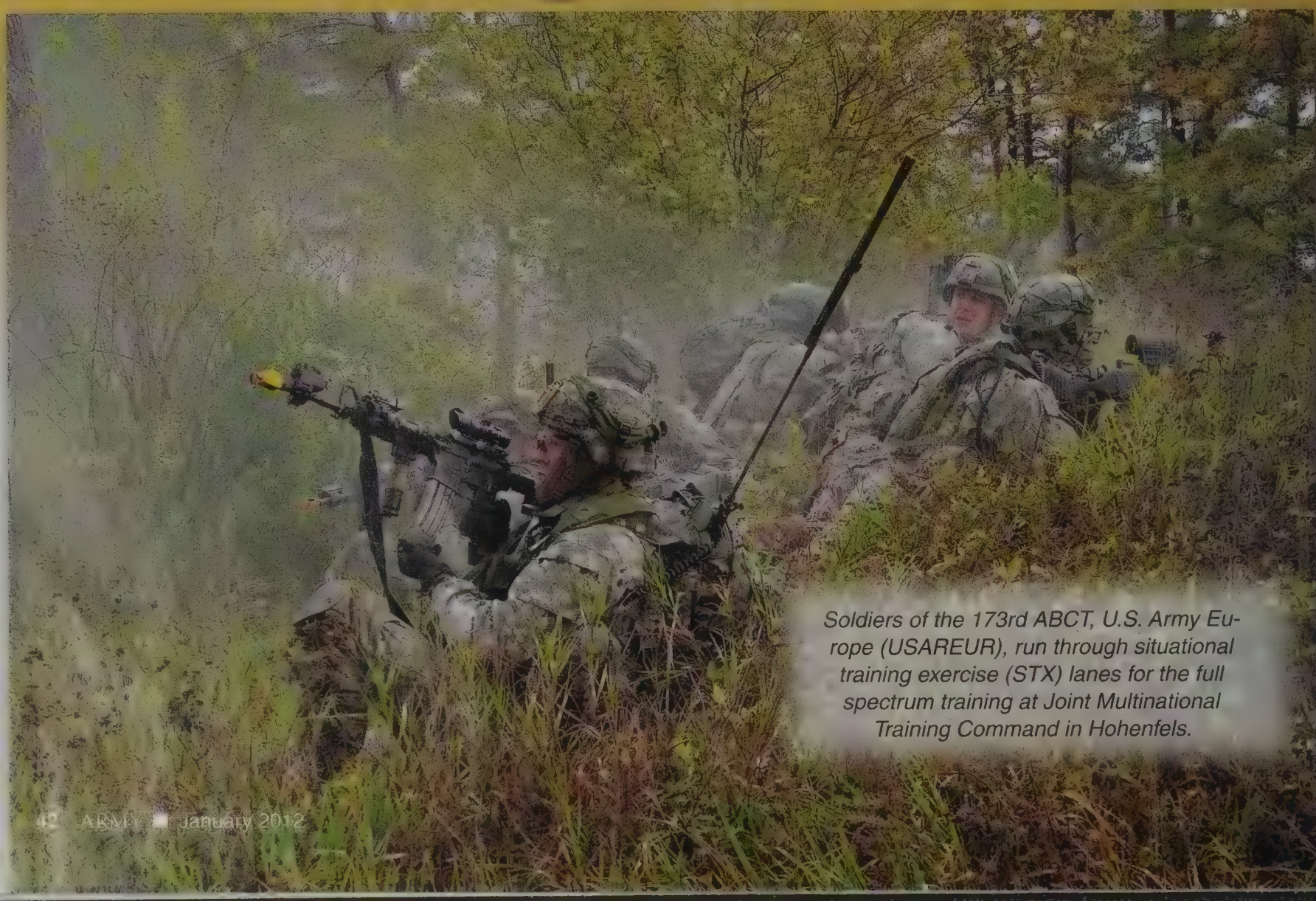
www.northropgrumman.com/rail

© 2011 Northrop Grumman Corporation

Two CH-47 Chinook helicopters from the 12th Combat Aviation Brigade support soldiers assigned to the 173rd Airborne Brigade Combat Team (ABCT) during an air assault exercise as part of the newest Full Spectrum Training Environment (FSTE) at Hohenfels, Germany, last fall.

The Army's Next Training Model:

Building on the Past as



Soldiers of the 173rd ABCT, U.S. Army Europe (USAREUR), run through situational training exercise (STX) lanes for the full spectrum training at Joint Multinational Training Command in Hohenfels.

CPL Alex Tinajero, a 50-caliber gunner with USAREUR's 173rd ABCT, cleans and checks his weapon before the first full day of STX training during the FSTE at Hohenfels last October.

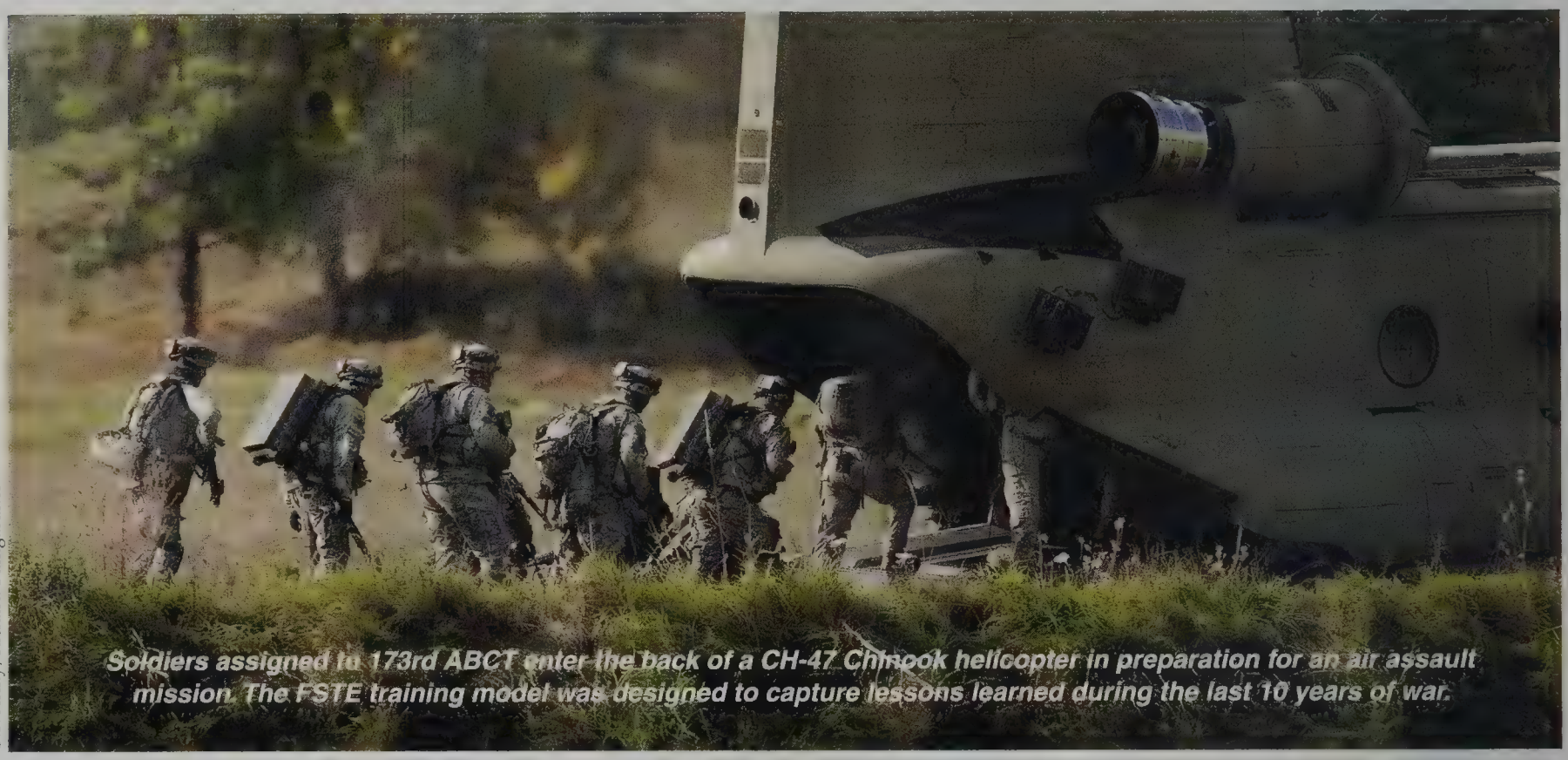
U.S. Army/Richard Hoops

We Prepare for the Future

Our military has learned many lessons over the last 10 years in Afghanistan and Iraq. Our institutional challenge now is how to effectively integrate those lessons into our training while preparing for future conflicts that could require us to conduct major combat operations against a near-peer competitor, counterinsurgency (COIN) operations in support of an allied partner's government, support of disaster relief in a neighboring country or a combination of all three in a single theater of operation.

The complexity of recent operations in theater and our assessment of potential future conflicts demand that our Army be prepared for operations across the spectrum of conflict—

By LTC Chris Budihas
and
MAJ Kevin Broadnax



U.S. Army/Richard Bumgardner

Soldiers assigned to 173rd ABCT enter the back of a CH-47 Chinook helicopter in preparation for an air assault mission. The FSTE training model was designed to capture lessons learned during the last 10 years of war.

from traditional offensive-defensive to stability and support operations—that might have to be executed in a time-compressed response. As such, the Army has renewed its emphasis on training conventional core skill sets, tasks and operations that have eroded over the last decade because of our required focus on conducting COIN operations. At the same time, our military leadership understands the need to avoid repeating past mistakes, which include applying the fatal "if we're good at one, we will be good at the other" mind-set.

Equally dangerous is the "either-or" philosophy, whereby training focuses on conducting major combat operations against an adversarial conventional force or COIN operations against an irregular force. To this regard, the Army's leadership has directed, in Army Doctrinal Publication 3-0 *Unified Land Operations*, that our formations must be prepared to fight using a construct of combined arms maneuver (CAM) and wide-area security (WAS) against a continuum of threats—a "hybrid threat"—that ranges from formidable conventional army units to terrorists and criminal elements. To that point, the combat training centers (CTCs), in conjunction with the U.S. Army Training and Doctrine Command Intelligence Support Activity (TRISA), have built and are improving the next CTC training model designed to build on past lessons as we prepare our soldiers, leaders and units for an unpredictable future.

LTC Chris Budihas *is the deputy chief of staff at the Joint Multinational Training Command, Grafenwoehr, Germany. He is an infantry officer with more than 24 years of infantry experience in both the U.S. Army and U.S. Marine Corps. He has served in numerous overseas operations in the Middle East, Latin America and Asia.* ***MAJ Kevin Broadnax*** *is an infantry officer and serves as the G-3 maneuver planner at the Joint Multinational Training Command, Grafenwoehr, Germany.*

In October 2011, the Joint Multinational Training Command (JMTC) executed its first iteration of TRISA's Full Spectrum Training Environment (FSTE) exercise, which centered on the 173rd Airborne Brigade Combat Team (ABCT). FSTE was designed to keep our Army's training both relevant and realistic by providing a common training scenario for use during all CTC rotations, built upon a Georgia-Azerbaijan-Armenia-Turkey scenario.

This scenario's environment gave each of the four CTCs designated battlespace on which to build training. Equally important, if not more so, is that their rotational units' actions were linked with one another. For example, what occurs during a rotation at JMTC in Grafenwoehr, Germany, has an operational environment impact on a unit executing a rotation at the National Training Center at Fort Irwin, Calif.

There's a common reference being made by leaders in their discourse that the Army needs to "get back to the basics" during home station—and specifically during CTC rotations. The FSTE training model, utilizing TRISA's FSTE scenario, was specifically designed to capture those lessons learned during the last 10 years of war while fully preparing our soldiers, leaders and formations for the wide range of future threats they might face. This scenario's hybrid threat—a combination of adversaries from regular, irregular and criminal groups—is an accurate reflection of the global challenges our formations will likely face in future conflicts. The likelihood of such a threat can be seen in the recent conflict in Libya, where the rebel National Liberation Army—backed by NATO—faced not only Muammar Gaddafi's conventional military but also his paramilitary forces, tribal militias, foreign fighters and local criminal elements.

Based on this assessment of future conflicts, the FSTE training model is designed to force a rotational unit to conduct simultaneous operations along the various points of the spectrum of conflict (from stable peace to insurgency to

general war and back) as the operational environment dictates within the span of the month-long CTC experience. Up to this point, a U.S. commander who faces a near-peer enemy with almost the same military capacity cannot ignore a terrorist or criminal element within an urban center in his area of operation because such an enemy might hypothetically attack his lines of supply and communication.

Scenarios such as these are extremely realistic and strain a unit's ability to properly synchronize all its warfighting functions, something that was observed during the 173rd ABCT rotation. In addition, the FSTE model compels a unit to implement the Army's doctrine of combined arms maneuver and wide-area security throughout the entire training process, as was the case for the 173rd ABCT during its 21-day rotation.

TRISA's FSTE model should not be linked only to CTC rotations; units should also look at implementing the model to complement support of their home-station training. TRISA has done a phenomenal job building an extremely detailed training model. It takes into account tactical- through strategic-level complexities of a dynamic operational environment that includes a hybrid threat balanced against an extremely challenging geopolitical and cultural backdrop. This training model, which is also readily usable or adaptable by our sister services in the joint community, gives operational, functional and multifunctional units within our Army the ability to use an off-the-shelf scenario that will test warfighting ability to integrate and synchronize their efforts in an effective manner against a free-thinking enemy.

One of the major advantages the JMTC offers the Army is its location in Central Europe, which supports U.S. Army Europe's (USAREUR) mission to train with its multinational partners. As a one-of-a-kind CTC, this provides our nation a strategic value and sets JMTC apart from other CTCs in the United States.

For the planning and execution of this exercise, JMTC involved allied partners, U.S. Air Forces in Europe (USAFE) and the other CTCs. This collaborative effort provided unmatched realism for U.S. soldiers having to work with—and through—foreign militaries during the exercise. During the 173rd ABCT's rotation, JMTC was fortunate to have a Slovenian infantry battle group serve as the host-nation security force, a motorized Slovakian infantry battle group serve as the conventional opposing forces, and a Bulgarian special operations team serve as the special-purpose opposing force. Ultimately, this exercise not only trained our participating U.S. units and coalition armies but also continued to effectively build on existing strategic partnerships among our nations. Training with our coalition partners allows us to develop these strong partnerships that in turn positively influence current and future real-world coalition building for ongoing operations in our current theater of operations and, most importantly, those unforeseen future global contingencies.

The JMTC's flexibility in rotational design allowed the command to modify the traditional CTC training cycle—in which a unit conducts its deployment operations, situational training lanes and command post exercises, followed by a challenging force-on-force phase of a week or longer—to account for the unique capability the 173rd ABCT possesses. A core competency of airborne units is their ability to conduct forcible entry operations; however, 173rd ABCT had not realistically trained that mission-essential task or conducted this operation in more than eight years because of its high operational tempo. Before the exercise, the 173rd ABCT had a limited number of aircraft available to conduct airborne operations training above the company level. This lack of aviation assets required USAREUR to coordinate with

U.S. Army/SSG Joel Salgado

Polish soldiers allied with the 173rd ABCT fire a rocket-propelled grenade at an opposing forces vehicle during FSTE at Hohenfels. The exercise brought together participants from 11 nations in a multifaceted training event that incorporated partner nations combating complex 21st-century threats.

U.S. Army/Richard Bumgardner

Running through the STX lanes at Hohenfels, soldiers from 173rd ABCT prepare to evacuate a wounded team member on a stretcher.

USAFE and U.S. Army Africa to receive enough airlift support to conduct a brigade airborne assault. The result of hundreds of staff hours of planning was approximately 1,000 paratroopers (including a Polish airborne company attached to the 173rd ABCT) exiting C-130J and C-17 aircraft in a mass attack. An important lesson learned from this rotation is the increased need for service component commands to work together in a manner to support not only CTC but also all other major brigade-level-and-above exercises, to realistically train our collective forces in a cooperative manner that echoes the military axiom of "train as you will fight." The benefits of such a joint exercise for all participants cannot be overestimated: All units, regardless of service component, improved their proficiency in warfighting and increased their readiness to execute their wartime mission.

Another major highlight of this rotation was that the 173rd ABCT and supporting 12th Combat Aviation Brigade conducted their portion as the CTC rotation in the live training domain while the 30th Medical Command (MEDCOM) executed theirs in the live-virtual-constructive training domains.

Another unique service that JMTC offers the Army is its ability to train functional and multifunctional brigades. As such, the 30th MEDCOM served as the primary training audience for JMTC's Joint Multinational Simulation Center (JMSC). While the 30th MEDCOM set up headquarters and physically collocated the 212th Combat Surgical Hospital, the JMSC created a "wrap-around" virtual and constructive feed that replicated 30th MEDCOM's Army battle command system events that were virtually occurring in the larger FSTE exercise beyond the boundaries of the 173rd ABCT areas of operation. The result was that all training audiences were able to achieve their training objectives, and the training value of all units cooperatively exercising their wartime missions simultaneously in one scenario was exponential.

This rotation set the foundation for future training that capitalizes on adding secondary training audiences that train virtually and/or constructively, while another unit conducts live training. Thus a maneuver enhancement brigade at Joint Base Lewis-McChord, Wash., and a battlefield surveillance brigade in Fort Hood, Texas, can participate virtually from their locations while a 1st Infantry Division BCT is executing a CTC rotation at Fort Irwin, Calif., and the XVIII Airborne Corps at Fort Bragg, N.C., provides mission command for the entire exercise. The richness of such a geographically dispersed exercise provides a realistic flavor to the rotation that would train a multitude of units in a way that saves precious training dollars while increasing readiness across a series of commands.

This rotation was an important step forward in GEN Martin E. Dempsey's belief that "massive multiplayer online role-playing games … will allow soldiers and leaders to interact and collaborate using common scenarios in a virtual environment with other soldiers within their units and across the Army." The FSTE training model offers a mechanism to accomplish our senior leaderships' vision to achieve institutional adaptation through learning, inculcated with mission command as a warfighting function, and to develop adaptive leaders and formations through collaborative efforts across the Army.

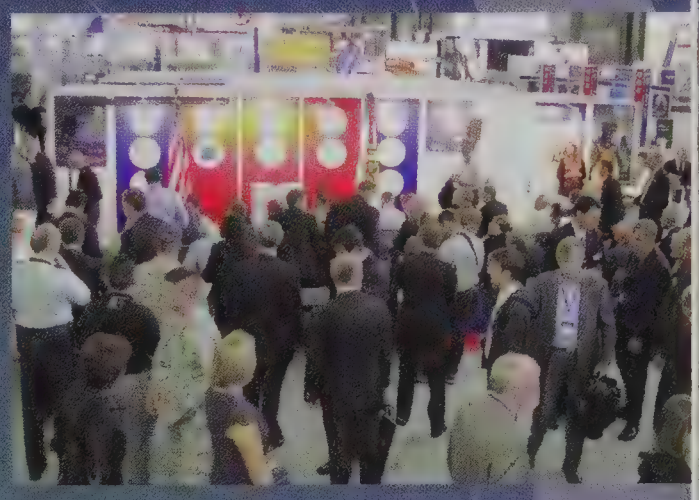
As our military continues to seek ways to capture the lessons learned from the conflicts in Iraq and Afghanistan during the past decade, we must delicately balance those lessons with a realistic projection of how to train to cover the range of potential contingencies that could occur across the spectrum of conflict. In his article, "Military Science in an Age of Peace," Sir Michael Howard states that in times of peace military leaders will be wrong in their assessment of what future wars will be, but the key is not to be too wrong. With that in mind, we find that the JMTC's rotation in October serves as a solid proof of principle that FSTE is the right training model to implement in both CTC and home-station training to prepare units for current and future conflicts. In addition, the model offers the possibility of increased integration and collaboration within and across the military services in an effort to get an additional, comprehensive, synergistic training value, while potentially reducing training costs during the nation's economically strenuous times. When it comes to improving this model and training, only our imagination can constrain us. ★

ASSOCIATION OF THE UNITED STATES ARMY

USA PAVILION

AT 2012 EUROSATORY

11-15 JUNE 2012 / PARIS



Book Your Space Now for the USA Pavilion

www.ausa.org

EUROSATORY
11-15 JUNE 2012 / PARIS

For USA Pavilion information and stand booking contact:

LexaLynn Hooper
Manager, USA Pavilion
T: +1 703 907 2666
E: lhooper@ausa.org

Amy Frankenstein
Sales, USA Pavilion
T: +1 703 907 2413
E: afrankenstein@ausa.org

U.S. COMMERCIAL SERVICE
United States of America
Department of Commerce

U.S. Army/Markus Rauchenberger

U.S. Army/Gertrud Zach

Above, CPT Troy Peterson, 2nd Cavalry Regiment (Stryker), throws a training grenade during U.S. Army Europe's (USAREUR) Best Junior Officer Competition in Grafenwoehr, Germany, in November 2011. CPT Peterson was named USAREUR's top junior officer during the competition, the first of its kind in Europe. Right, CPT Peterson completes a day-and-night land navigation test. Below, CPT Peterson directs an AH-64 attack helicopter strike on a target at the close-combat attack lane.

U.S. Army Europe Names

U.S. Army/Gertrud Zach

U.S. Army/Markus Rauchenberger

Far left, CPT Thomas Lorenson, 2nd Cavalry Regiment, makes necessary rifle adjustments during an M4 zero qualification test. Left, 1LT Emille Prosko, 173rd Airborne Brigade Combat Team, navigates the demanding obstacle course during the Best Junior Officer Competition.

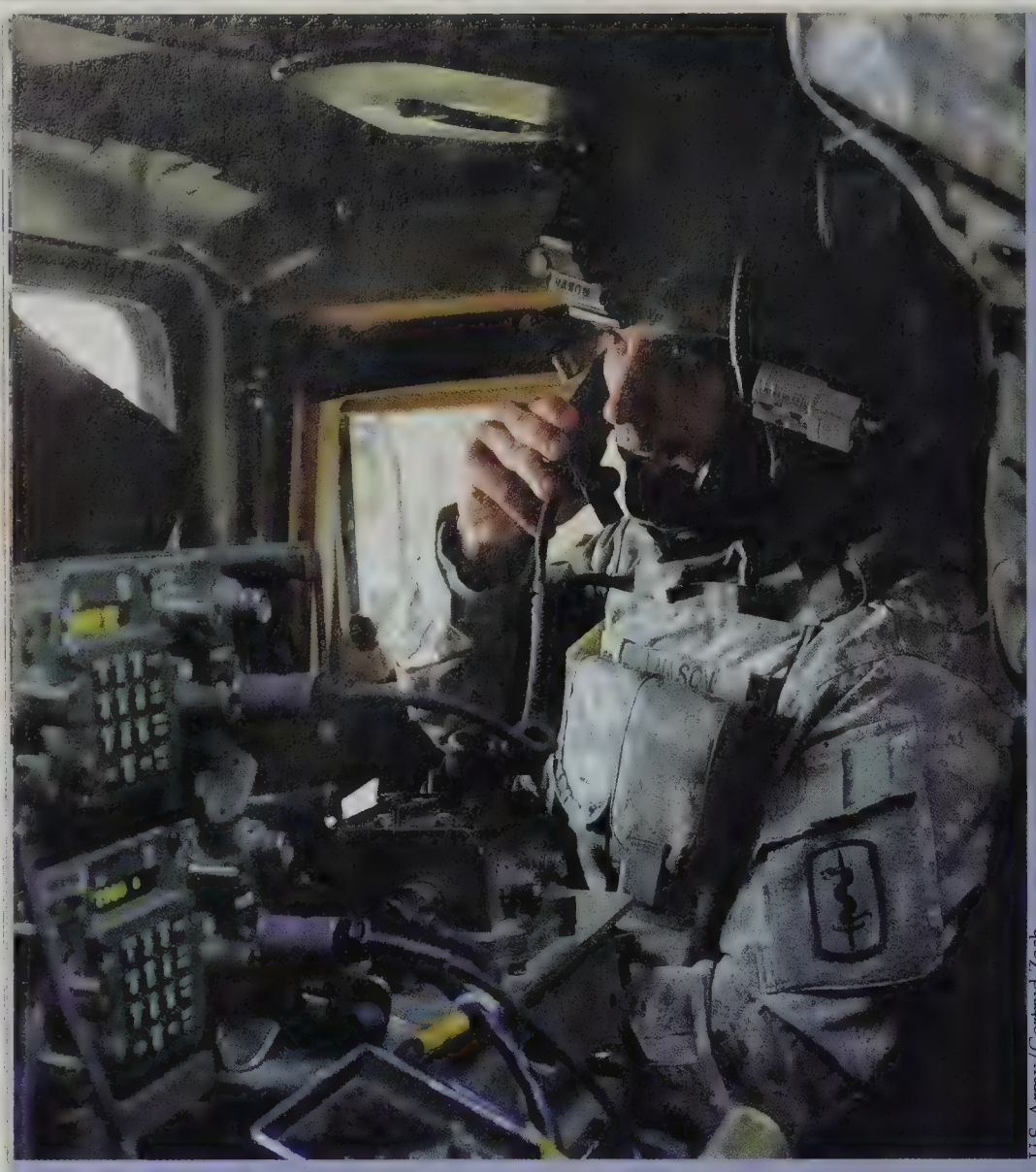
Best Junior Officer

U.S. Army/Markus Rauchenberger

CPT Troy Peterson, squadron logistics officer for 2nd Squadron, 2nd Cavalry Regiment (Stryker) outperformed officers representing units throughout Europe in the first Best Junior Officer Competition at the Joint Multinational Training Command at the U.S. Army Garrison (USAG) Grafenwoehr, Germany, in November.

The competition, which is the only one of its kind in the U.S. Army, challenged the entrants physically as well as mentally, including two foot marches totaling 25 kilometers. For three days, company-grade officers competed in warrior tasks and drills and displayed their decision-making, problem-solving and leadership skills. Participants came from a variety of Army career branches, among them air defense artillery, aviation, engineers, infantry, medical, military intelligence and military police. A military board evaluated the competitors on personal appearance,

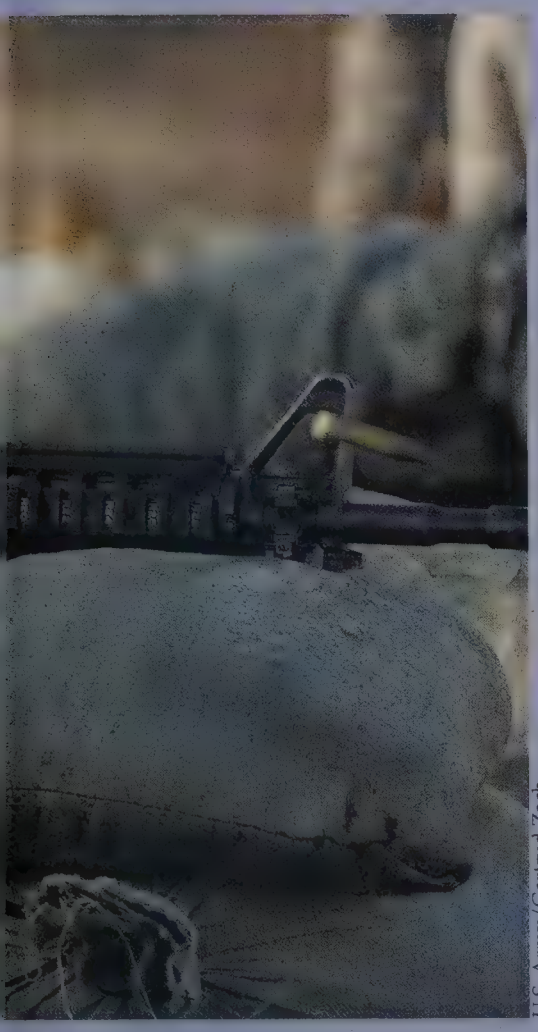
First Lieutenant Kyle Soler, 173rd Airborne Brigade Combat Team, attacks the obstacle course, one of multiple tasks that challenged the competitors at Grafenwoehr's Joint Multinational Training Command.



U.S. Army/Gertrud Zach

Clockwise from above left, CPT Jeffrey C. Nason, 30th Medical Command, calls in a request for information from soldiers following in a convoy. First Lieutenant Christopher Amsley, 10th Army Air and Missile Defense Command, fires his M4 rifle during an M4 zero qualification test. CPT Marie Hough, USAREUR Headquarters and Headquarters Battalion, finishes the day and night land navigation test. First Lieutenant Lyndon Hill, 30th Medical Command, conducts a patrol on the react-to-contact and indirect fire testing lane.

U.S. Army Markus Rauchenberger



U.S. Army/Gertrud Zach

U.S. Army/MSG Robert Hyatt

Second Lieutenant Stanley Bershinsky, representing 202nd Military Police Group, prepares a sector sketch as part of the situational training lanes. The three-day competition included pistol and rifle qualifications, two foot marches and day/night land navigation as well as decision making, problem solving and various leadership skills.

conversational style, knowledge of world and local affairs and current events, awareness of military programs, and their overall soldier knowledge. In addition, each competitor was required to write an essay on the significance of the U.S. Army in Europe.

CPT Peterson, who became logistics officer of the 2nd Squadron two months before the competition, credited that assignment with broadening his experience and developing him mentally. His previous command of a combat outpost in Afghanistan sharpened his combat arms skills. "I was able to fall back on those even though I hadn't been able to practice them a whole lot recently," he said. "Those skills served me really well in the situational training lanes and some of the really infantry parts of the competition."

The Grafenwoehr training area commemorated 100 years of military training in 2010 and continues to support the joint services and NATO as well as Army training.

LTG Mark P. Hertling, commanding general of U.S. Army Europe, commended all the participants and summed up the value of the challenges they faced. "You are going to walk away from this not only with sore feet, and a whole lot of fatigue," he told the competitors, "but you're going to understand that every day you have to learn something new and push yourself. That's what being a soldier is about." ★

U.S. Army/Gertrud Zach

U.S. Army/MSG Robert Hyatt

Commanding General of U.S. Army Europe LTG Mark Hertling (center, rear) joins the Best Junior Officer competitors, who represented units throughout USAREUR. The goal of the competition was to help leaders keep their skills up-to-date and their minds sharp.

The Sun Sets on Operation New

The last U.S. flag over an American military base in Iraq has been lowered, and the final Army-led convoy has crossed the border into Kuwait. The United States has met its commitment to remove its troops under an agreement to leave Iraq by December 31, 2011, and end Operation New Dawn, the carryover training and support mission from the combat phase, Operation Iraqi Freedom.

The American withdrawal began in May 2010, orchestrated by Third Army from its forward headquarters in Kuwait and its stateside headquarters, and included massive efforts by elements of the U.S. Army Materiel Command (AMC) and all service elements of the U.S. Transportation Command.

Called the "responsible drawdown of forces," the withdrawal operation incorporated responsibility at each echelon and phase—sorting the massive stockpile of U.S. equipment, ammunition, supplies, vehicles and downright junk into what was useable or repairable, and weighing whether the cost of transporting an item exceeded the value of replacing it, considering its condition and depreciation.

At the outset, Third Army officials said it would entail transporting from Iraq approximately 88,000 shipping containers filled with gear, along with more than 40,000 pieces of rolling stock and 13,450 short tons of cargo—approximately 2.8 million individual items in total. The array went from Abrams tanks to ballpoint pens, and the driving pur-

Dawn, but the Shadows Remain

By Dennis Steele
Senior Staff Writer

pose was to save or recapitalize the maximum amount of dollar value possible. It was a remarkable logistics feat. Officials called it the biggest transportation operation since World War II. By early December, there were only five American bases—declining one by one as each was inventoried and turned over to Iraqi authority—and fewer than 8,000 U.S. troops in country, with 500–800 troops departing each day. Contingency Operating Base Adder—the final refueling and rest station on the road to Kuwait—will be the last to close.

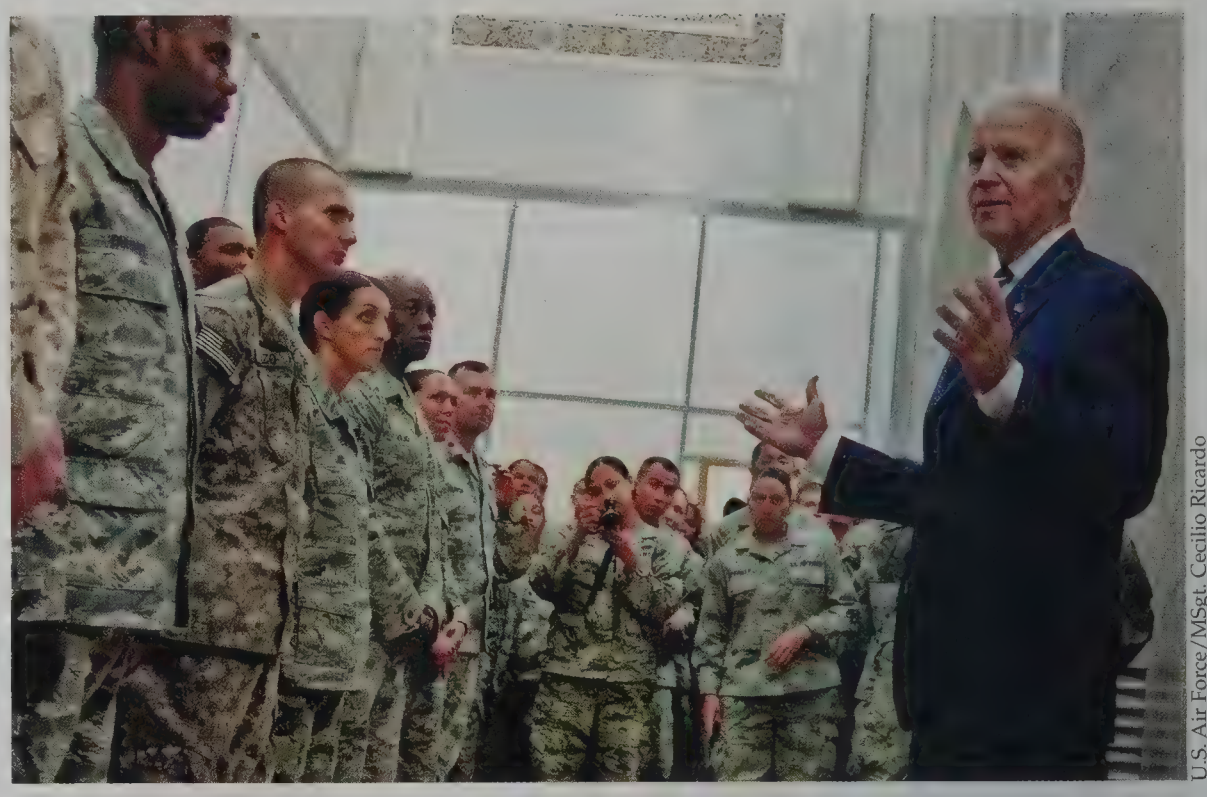
At the height of the war in Iraq, more than 500 U.S. bases were spread throughout the country—places where the troops endured searing heat in the long summers, mud in the short winters and sandstorms in between. The bases started out as ramshackle Iraqi military posts or government buildings that had belonged to Saddam Hussein's regime. A few of them were palaces; others were abandoned schools, and some were structures or houses found in various stages of filth or decline that could be made defendable.

As years passed, some bases grew large and elaborate, incorporating massive dining halls and Army and Air Force Exchange Service facilities that sold everything from soap to souvenir t-shirts, burgers, tacos and chai lattes. There were recreation centers, shuttle busses and giant laundries that ran most of the day with one-day service at some. A range of stateside entertainers trouped to stages and theaters. Precisely laid rows of white portable buildings and trailers made up large living areas, and blue and green portable toilets were clustered along the roads. Everywhere, the constant growling drone of generators sounded, and every base was eventually enclosed and laced by concrete wall sections and Harsco baskets and dotted with bunkers for protection against rockets and mortar attacks. Some bases were better fitted than others, but each tried to carve out a little piece of America for the troops, and anything that made all the bases had to be brought there. Oddly, even the sand to make concrete at some places had to be trucked in as the local variety (in a land of sand) was not suited for construction purposes.

The infrastructure of those bases was inherited by the Iraqi government. Army officials said that about $400 million worth of other gear was left behind for use by the Iraqi government. Approximately $6 billion in U.S. aid (military sales and civil assistance packages) has been earmarked for Iraq in 2012.

A U.S. Army official noted, however, that no American mine resistant ambush protected (MRAP) vehicles will be turned over to the Iraqis. All MRAPs will be brought out to fill needs in Afghanistan or for training purposes elsewhere. The remainder could be put into prepositioned storage overseas or returned to the United States for unit issue.

At the peak, more than 170,000 U.S. troops were on the ground in Iraq, and they were attacked between 100–140 times a day during the conflict's most furious periods.



U.S. Air Force/MSgt. Cecilio Ricardo

Vice President Joe Biden visits with more than 100 soldiers and airmen following the Iraqi government's Day of Commitment ceremony honoring U.S. and Iraqi service-members in Baghdad in December.

More than 4,400 American military personnel died there; and more than 32,000 were wounded in the 8 years, 8 months, and about 2 weeks that elapsed since the March 2003 invasion. An as-yet-unknown number ultimately will suffer aftereffects from the war, but already the count for those seeking help exceeds 100,000. The final weight of the toll has not been reached and may never be truly measured.

About 16,000 U.S. embassy-affiliated personnel will remain in Iraq, operating from the massive, fortified embassy complex in Baghdad. More than 5,000 of that number are contracted security personnel who will secure the embassy grounds (along with a small U.S. Marine contingent) and other U.S. diplomatic offices around the country while protecting diplomatic personnel as they move around.

Some uniformed American personnel will also continue training efforts under assignment to the embassy, 200 or fewer at any given time under the Office of Security Cooperation-Iraq. Soldiers from AMC's 402nd Army Field Support Brigade will provide maintenance support for the Army vehicles transferred to the State Department.

Other support and sustainment for the civilian-led mission in Iraq will be provided by contract personnel—the whole gamut that was previously provided by the U.S. military, everything from mail delivery to medical evacuation.

The Iraq withdrawal ended about the same as the invasion phase began: well planned and adhering to a rigid timetable. Each air and troop movement, down to the last, was coordinated to a specific sequence that got the American gear and personnel out, load by load, while continuing a security footprint for the diminishing number who remained as time progressed.

Some troops and specific cargo were flown directly from air bases in Iraq to their destinations (eventually to the United States in most cases), and some personnel were flown to Kuwait for an intermediary stop before proceeding.

The final loads of equipment were brought into Kuwait by protected convoys, and the last combat unit elements convoyed into Kuwait under their own protection to turn in vehicles and equipment for storage or onward sea transportation while soldiers boarded aircraft bound for home. The objective was to have most (if not all) of the departing American troops home from Iraq by Christmas.

The caveat is a proposal made by the United States to Kuwait to retain a brigade combat team (BCT)-sized unit in Kuwait to promote regional security and respond to contingencies. The Kuwaiti government did not immediately agree to such a basing proposal, and as ARMY Magazine went to press it was not known if such an agreement would be made.

The 1st BCT, 1st Cavalry Division, which will be one of the last combat elements to leave Iraq as an intact unit, had some months left on its normal deployment time and was designated to stay in Kuwait for some of that remaining time. It is not known whether (or if) the BCT could linger in Kuwait to see if an agreement is put into effect, so that unit, too, could have been airlifted home for the holidays as of this writing. If an agreement is reached in the future, a new BCT rotation into Kuwait would be established.

U.S. Vice President Joe Biden travelled to Iraq to mark the final phases of the American withdrawal and to help solidify the future relationship between the United States and Iraq.

"We are embarking on a new path together, a new phase in this relationship," the Vice President said. "That partnership includes a robust security relationship based on what you decide—what *you* decide—you think that relationship should be. We will continue our discussions with your government over the substance of our security arrangements, including areas of training, intelligence and counterterrorism."

He added, "Iraq and the United States are two nations bound together by many things, but particularly bound together by the more than eight years of shared sacrifice and struggle."

"Our troops are leaving Iraq, and we are working on a new path together, a new face of this partnership," Vice President Biden said. "This is marking a new beginning of the relationship that will not only benefit the United States of America and Iraq. I believe it will benefit the region and will benefit the world," he added.

Vice President Biden attended the ceremony marking the handover of Camp Victory, the sprawling American

base in southern Baghdad. To the U.S. military personnel in the crowd, he said, "Because of you, and because of the work you have done, we are now able to end this war."

From the U.S. point of view, the possibility of increased Iranian influence in Iraq is of particular concern following the American military departure. A great deal of friction continues to simmer among Iraq's three major ethnic groups—the Sunnis, Shias and Kurds—opening the possibility of escalated strife and potential breakup along ethnic lines with armed conflicts to claim major oil reserve regions ensuing.

Since 2008, American diplomats and Iraqi government representatives continued efforts to restructure the zero-balance agreement into one that would allow a number of U.S. military trainers to remain in Iraq (10,000–15,000) and continue work to improve the Iraqi security forces.

A core element from the ever-shrinking American force in Iraq would have made up that training/support element if an agreement was reached. As the December 31 deadline drew nearer, however, it became increasingly necessary to plan and set in motion the last stages of the full withdrawal. In late October, Iraqi officials again refused to shift their stance on a status of forces agreement (SOFA)—requiring a SOFA under which American soldiers could be prosecuted for conduct of their duties in Iraqi courts. That was a deal breaker. No U.S. SOFA would allow that, and the plug was pulled. There would be no turning back; everyone would depart in a redeployment sequence that could not be sidetracked.

From the Iraqi domestic political point of view, having the American military leave was virtually a necessity. Full sovereignty was the engine driving Iraqi domestic politics, and that translated as no continued American military presence.

High-ranking American officials in Vice President Biden's party discounted ever again basing a significant number of U.S. troops in Iraq, however, essentially saying that the train has left the station for that possibility.

Nevertheless, several U.S. military and civilian leaders left open the possibility of conducting exercises or training events in Iraq under a "normalization of relations" scenario, much the same as the United States does with other countries under various alliances or agreements. It is possible that some Iraqi military personnel could be trained by Americans outside Iraqi territory, but follow-on agreements will be necessary for any such thing to happen.

A clean break could be good for both countries. If any further security agreement is reached by the two countries in the future, it will be from a new starting point and not seamless continuation that carries numerous caveats.

In the United States, the end of nearly nine years of military involvement in Iraq was noted without much celebration. It was more a case of relief than revelry. A lot has happened in the United States since the war began, and domestic politics have since focused attention on internal problems, economic turmoil, budgets and taxes.

Meanwhile, over the past two-and-a-half years, the war in Afghanistan regained a central position in terms of military effort, political attention, media coverage and ramifications for international relations. Now, a series of U.S. military withdrawals has begun there, edging toward a 2014 deadline to have nearly all U.S. forces out of Afghanistan.

The fight against terrorists, wherever they might be, will continue, but it will largely shift to an intelligence fight with force carried to those enemies by clandestine or special operations forces or by air strikes, using missiles or unmanned aircraft whenever possible.

The roles for U.S. conventional military forces will be adjusted (as those forces also face budget and force reductions) to meet other threats. Emerging is an American strategic focus on another adversary, China, and a military and political shift toward efforts in the Pacific regions to counter China's potential influence and possible political, if not military, domination. The Pacific will be a major area of U.S. attention far into the future. The global significance of maintaining a presence in Europe also remains essential.

But the war of Iraq will stay with us for a long time, too. The lives of the families of the American men and women who died there have been forever changed—generations. The promised long-term care for the soldiers wounded there will need to be fulfilled for decades—lifetimes. The memories of those who served there will never be eclipsed. The history of the war will be endlessly dissected. The graves will be perpetually tended.

The sun has set on the war in Iraq, but the shadows will remain. ★

The Association of the United States Army's Institute of Land Warfare

AUSA Winter Symposium and Exposition

A Professional Development Forum

AMERICA'S ARMY– DECISIVE FORCE

Register online at www.ausa.org

22-24 FEBRUARY 2012

Greater Fort Lauderdale/
Broward County Convention Center
Fort Lauderdale, FL

FOR MORE INFORMATION CONTACT: AUSA, Industry Affairs, 800-336-4570, ext. 365

CompanyCommand

Building Combat-Ready Teams

To: Company Commanders
From: Company Commanders

The Five Most Relevant Leader Attributes

Our leadership doctrine (FM 6-22) identifies 18 attributes that "distinguish high performing leaders of character." These leader attributes are described as inherent characteristics that shape how individuals act and respond to their environments. Our doctrine doesn't rank order the leader attributes, so the CompanyCommand team set out to discover whether some attributes are more relevant than others to leading platoons and companies. The team utilized an unconventional approach—asking junior officers to reflect upon advice they had already given or stories they had told and then identify which leader attributes were required in those situations. A clear, surprising pattern emerged. Whether the company-grade officers were giving advice to the next generation of platoon leaders or telling a story about a typical counterinsurgency operation in Afghanistan, they most frequently credited the same five leader attributes—judgment, interpersonal tact, confidence, respect and duty. This month, we share some of the advice and stories that reflect the relevance of those leader attributes.

Leader Attributes Revealed in Advice For the Next Generation of Platoon Leaders

From 2008–09, several hundred officers assigned to the Maneuver Captains Career Course [MCCC] voluntarily completed a survey in which they were asked: "If you could pass on one lesson to the next generation of platoon leaders, what would you say? What is the story behind this insight or recommendation?" Their responses were published in a series of MCCC yearbooks, which are available in the CompanyCommand forum. These officers were later invited to uncover the deeper meaning in their own advice by interpreting it using doctrinal terms, including the leader attributes. Each officer also added a title to his or her advice. What follows is some of the advice that applied to *confidence, judgment, interpersonal tact, respect* and *duty*.

Do the right thing. Don't get caught up in being better than the guy next to you or worry about who will get rated higher. Teach your brother platoon leaders everything you know. Don't hold back. You may have to count on them to cover your left or right flank. Even if they resist you at first, continue to be the better person and share your knowledge and experience. No regrets.

Establish a bond within your team. First and foremost, love and care for your Soldiers. Inspire them to believe not only in you but also in themselves. When you deploy to a combat environment, your Soldiers, NCOs and fellow officers become your family. Gain their trust and respect, and there is no limit to how far they will push themselves for you.

Have faith in those you lead. Even though you are their platoon leader and outrank them, you are not special and are not better than your Soldiers. Somebody has to be in charge, and for some reason, you are. In all you do, take your Soldiers' well-being into consideration. As soon as you truly do this and they know and trust you, your Soldiers will go to the ends of the Earth for you. Never ask one to do something that you yourself are not willing to do. Soldiers are not pawns in a game of chess but rather are somebody's son, somebody's brother, somebody's husband or somebody's father, just like you. All of you want to come home; your job is to make sure this happens while still accomplishing the mission. Don't be afraid to stick up for them when you know a mission is tactically flawed. Nobody, including "higher," wants to see Soldiers hurt or killed, and it's your job to find a way to reduce the risk to an acceptable level for the possible outcome. Often, higher doesn't fully think through a mission and will listen to your input. If you can't find a way to justify the mission, let higher know that you think the risk isn't worth the end state. When your Soldiers see you stand up for them to somebody that outranks you, you will earn their trust. Don't be afraid to ask for and accept help from your Soldiers. You are all on the same team; they are out there, just like you, risking their lives.

Leadership priorities. Soldiers respect competence above all. It is not about your rank or being best friends with them. If you are a competent leader with sound judgment, your Soldiers—whether they like you or not —will do

Company-grade officers rank establishing a bond with the team, gaining soldiers' trust and respect, taking their well-being into consideration, and having faith in them as integral attributes of a good leader.

what you ask of them because they know you have weighed the alternatives and chosen the best course of action for the task. Prioritize your Soldiers above evaluations or the perceptions of others, and you will be successful.

Learning and leading. As a new platoon leader, you must find a balance between learning from your subordinates and being a decisive leader. There is never harm in asking a subordinate for input; in fact, this tells them that you acknowledge and respect their experience. Once you have received their input, however, it is up to you to make the decisions and put your name on the plan. Once you show your Soldiers and NCOs that you are genuinely looking out for their best interests and do not view your leadership as dictatorial, you will find you have their eager support. A platoon functions infinitely better as a team rather than as a collection of Soldiers who follow the draconian orders of their superiors. It is our Army's ability to foster this spirit, a direct result of our superb NCO corps, that makes the U.S. Army superior to any other military force in history. Just remember that at the end of the day, you remain responsible for everything your platoon does or fails to do. No matter how good you may feel your team is, never falter in your discipline and watchfulness.

Trust your instincts. Always trust your instincts. There will be times that you will have a "gut feeling" about something that your platoon sergeant, an NCO or even a fellow officer tells you. If it does not make sense to you, then go with what does. Of course you will need to listen to what others (especially those with experience, like your NCOs) have to say, but understand that the decision ultimately lies with you. If you have the time, talk it out and see what will work best; if you don't, just trust your gut instinct.

Two simple rules for being a platoon leader. 1. Understand that you are the platoon leader, but if you don't take the time to listen to your platoon sergeant, NCOs and junior Soldiers, you won't have a platoon for very long. Listen to their advice and then make your decision. 2. In the absence of orders, make a decision. In the COIN [counterinsurgency] environment, events often occur far too quickly to draw up contingency plans and run through the entire orders process. Do not be afraid to act of your own volition.

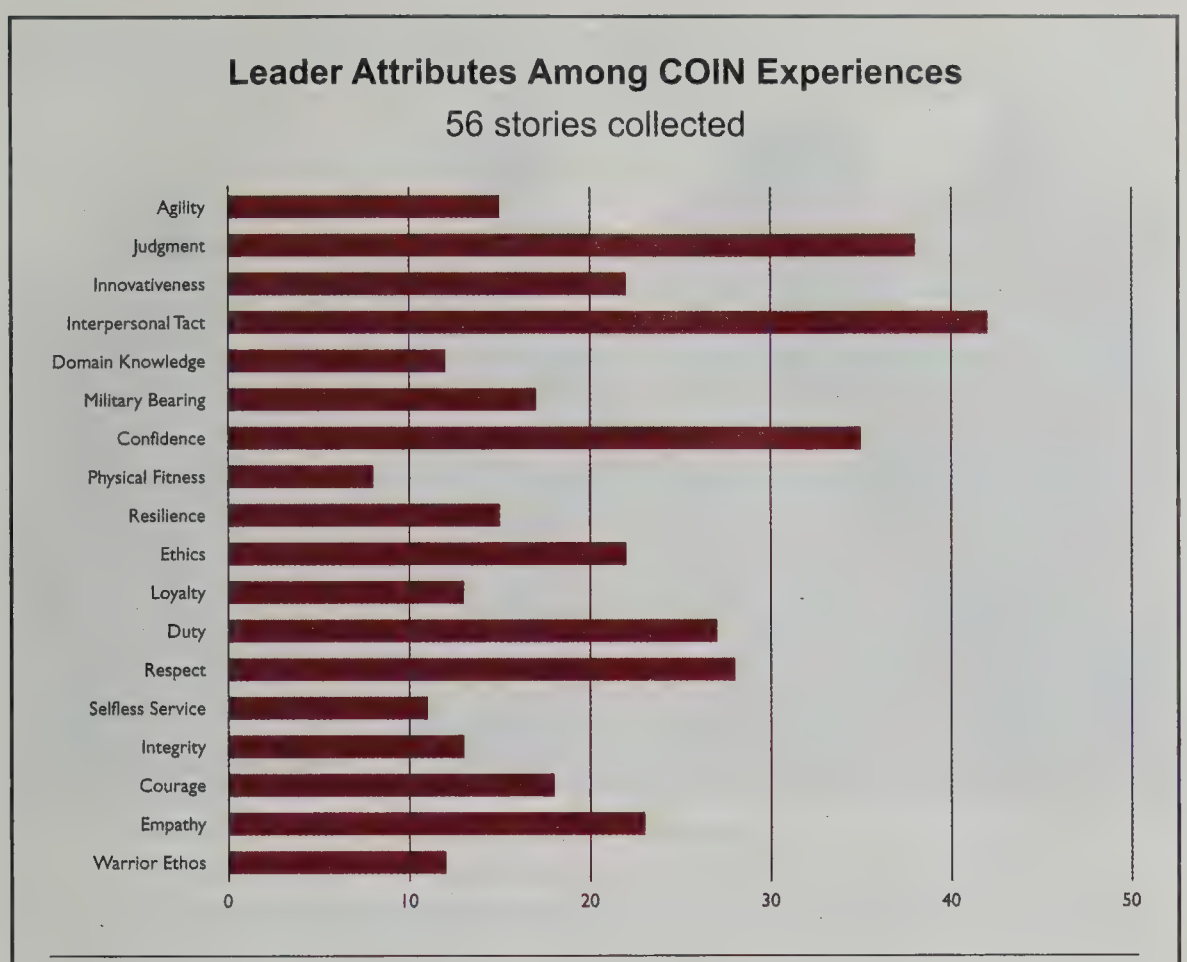
Use your brain, use your imagination, understand. Don't be afraid to use your imagination. Just because the "book" doesn't say that a task can be accomplished a certain way does not mean that it cannot be. Numerous times in OIF [Operation Iraqi Freedom] II, I found myself stuck making decisions that were doctrinally unsound but tactically necessary, such as clearing entire neighborhoods with only one squad of Soldiers because an IED [improvised explosive device] had gone off on a patrol and one of the Soldiers in that patrol saw the triggermen run into that neighborhood. Ask questions. You are a 2LT; you don't know everything, and everyone around you knows that. Think and ask questions about everything: property accountability, mission tasks, maintenance. Continually pester your XO [executive officer]. As the senior lieutenant in your company, he or she has a wealth of knowledge and most likely has experienced whatever it is that you are fac-

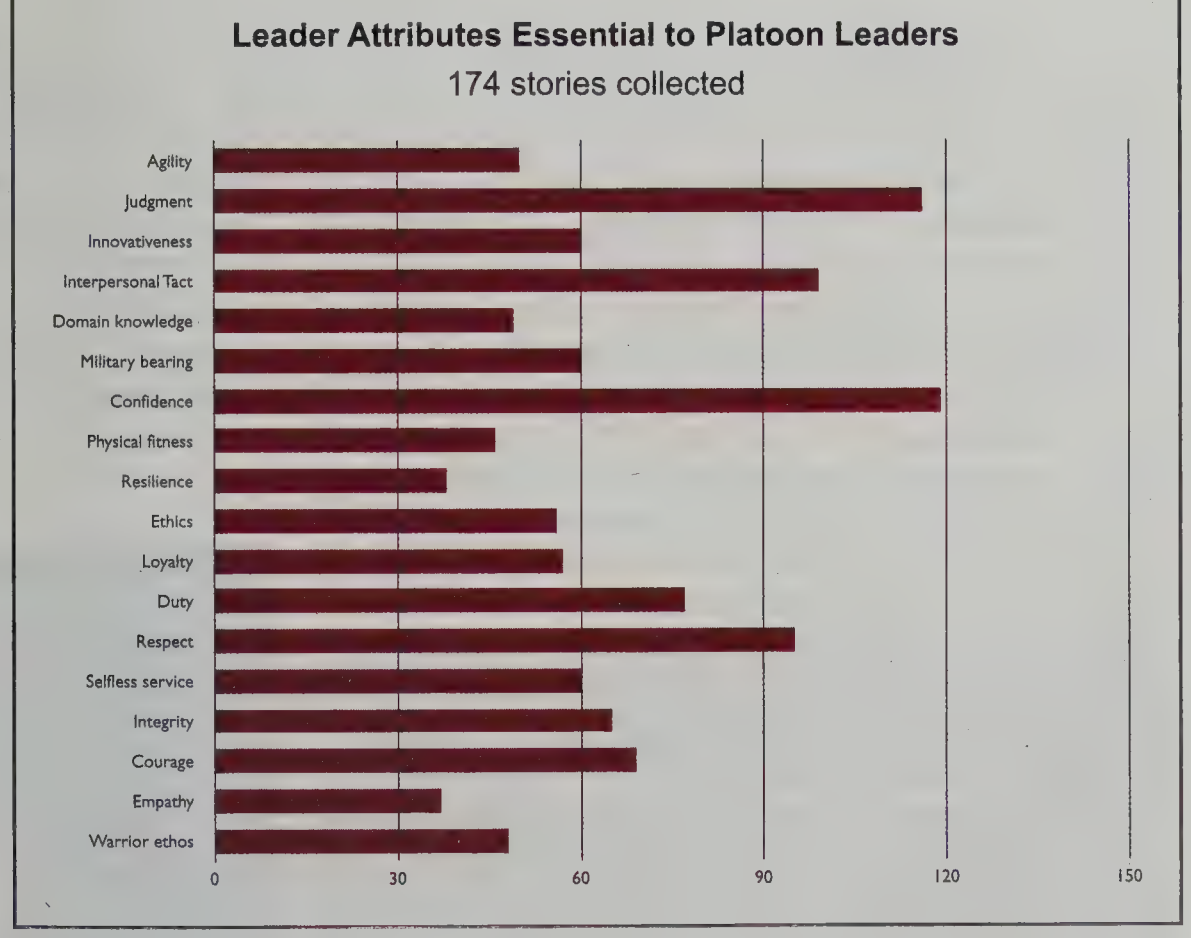
Finding Meaning in Natural Stories. The stories we tell tend to emerge from our deeply held beliefs and attitudes. A naturally occurring story is like the tip of an iceberg—there is much more substance below the surface. Our everyday, conversational stories usually come out as fragmented anecdotes; we always write less than we'd say, and we always say less than we know. Consequently, much of a natural story's context is left unspoken. The only person who understands the intended meaning of a story is its speaker, and even the speaker may not be aware of his or her full meaning until given the opportunity to reflect on his or her words. In this study, the CC team collected naturally occurring stories and then asked the storytellers to reflect upon their own stories and to answer questions about their meaning, using doctrinal terms and constructs such as the leader attributes. This process enabled the storytellers to recollect their unspoken contexts and to bring them "above the surface" so the entire profession can see and learn from them.

ing. Every deployment is different. Just because you have NCOs who constantly remind you that they have been there, every rotation and every area is different. You will find entire neighborhoods that are at complete opposite ends of the spectrum from one another. Listen to your NCOs and heed their advice, but do not accept it as gospel. You are the platoon leader, and it is your decision that matters.

Value your NCOs! Lean on and learn from your NCOs. They are the heart and soul of our Army. Don't ever take them or their experience for granted—respect them! As a platoon leader, your platoon sergeant will be your lifeblood; pick his brain and understand that you are the one without experience, so keep an attitude of humility and an open mind.

Welcome to leadership, the loneliest time in your life. You have one mouth and two ears, so listen twice as much as you talk. If you do talk, know what you are talking about or you will lose your credibility as a leader. Like credit, credibility is very hard to get and very easy to lose. In order to be an effective platoon leader, you have to think in terms of what is good for the Soldier, the unit and the Army. There are no "cookie cutter" solutions. You have to figure out what motivates particular Soldiers and use it to motivate them. If you schedule training, be there. Sergeant's Time isn't just for sergeants. Make sure it is being done to *your* standards. If it doesn't feel right, it probably isn't. Train your Soldiers hard; they expect it from you. Make sure your Soldiers know the difference between mistakes and bad decisions; retrain mistakes, but don't put up with bad decision-making. If you talk the talk, you'd better be walking the walk. You live in a fishbowl, and your Soldiers are constantly watching you swim.





Leader Attributes Expressed In Counterinsurgency Experiences

In the summer of 2011, we asked 56 company-level officers in Afghanistan to tell the story of an experience that represents what "doing COIN" [counterinsurgency] is like for them. After telling their stories, they each completed a survey that allowed them to interpret and label their stories in doctrinal terms. When the results were tabulated, we were surprised to discover that these deployed leaders highlighted the same top five leader attributes that the MCCC students had—interpersonal tact, judgment, confidence, respect and duty—although interpersonal tact came to the fore in the COIN environment. One distinct difference was that the leader attribute "empathy," which was the least relevant attribute in the advice to platoon leaders, was much more relevant to leaders discussing their COIN experiences. What follows is an experience described by a platoon leader in Afghanistan. As he understands it, his story involves all five of the most relevant leader attributes.

Interpersonal tact ranked as the top leader attribute in a survey conducted among company-level officers who had experienced counterinsurgency operations in Afghanistan. Appreciating the experience and outlook of a native elder may not only blunt his criticism but also inspire his cooperation.

Defeating a Faceless Enemy

"We were searching some qalats *[walled family compounds] in a village because road workers had been shot at from that location the previous day. I was talking with a local schoolteacher who was providing me information about Taliban activity in the village when an older man approached. He was irate about us searching his* qalat *and disdainful of the Afghan Police and Coalition Forces, saying that we never knew where to search and that we couldn't keep the people safe. He said the AUP [Afghan uniformed police] are no good, the Americans are no good, and that we basically stink at our jobs. And of course he denied that the Taliban had fired at the road workers from the village, despite all the evidence and intelligence.*

"It was hot, and the searches weren't finding anything. And this guy was really getting on my nerves. I was tempted to tell him to go away or I'd detain him for interfering with an investigation, but I could tell that he held influence in the village. Once this elder arrived and started complaining, the schoolteacher's attitude changed. I realized that the elder's bad attitude would spread like a disease if left unchecked, so I took a deep breath and humbly spoke with him. I said that security was a give-and-take and that we needed the people's assistance to protect them from the Taliban.

"He replied that anyone who reported on the Taliban would be killed, so I informed him about the anonymous tip line and asked him to tell others in the village about it. I also mentioned the rewards program that paid cash to locals for providing information on caches or IEDs. As soon as I could, I turned the conversation over to the AUP chief who was present. The man's anger seemed to lessen the longer he spoke with the Afghan police chief. We spent over an hour talking with him, and by the time we left, he was no longer angry. When we visited the village the following week, that same elder welcomed us and was friendly."

If our stories are indeed windows into our beliefs and attitudes, then we as company-level officers value and rely upon the leader attributes of judgment, interpersonal tact, confidence, respect and duty. Do these findings correspond to your experiences? We invite you to log on to your forum at http://CC.army.mil and join the conversation, or to write us at cocmd.team @us.army.mil if you are not a currently commissioned officer. There is great value in sharing our stories, listening to others' stories, reflecting on what we hear and talking about it with fellow professionals.

This article is the fruit of a G-6-sponsored fiscal year 2010 Army Study Program study on narrative-based research methods. The approach described here is pioneered by David Snowden, a Welsh physicist and knowledge-management thought leader who argues that abductive reasoning is most appropriate to gaining understanding of complex systems. A research report on the complete study, titled "Making Data Meaningful: Leveraging narrative-based research methods," is available in the Defense Technical Information Center (www.dtic.mil). Questions and comments on this article should be directed to peter.kilner@us.army.mil.

Soldier Armed

Shadow UAS

By Scott R. Gourley

With the projected milestone achievement of 700,000 flight hours by the end of 2011—and with more than 90 percent of those hours flown in combat operations—the RQ-7B Shadow Unmanned Aircraft System (UAS) plays a critical role in ongoing U.S. Army operations.

As described by Steve Reid, Senior Vice President and General Manager, AAI Unmanned Aircraft Systems (AAI is an operating unit of Textron Systems), the company's Shadow platform is "a tactical-class unmanned aircraft system featuring a less-than-500-pound aircraft equipped with fairly sophisticated technology to provide an 'unblinking eye' over the battlefield. But another important takeaway is that it is a brigade commander's organic resource. It has been fielded with every brigade in the Army, and in many instances it is the only aviation at the brigade commander's disposal."

Key activities performed by Shadow range from route surveillance to organic communications relay capabilities through the installation of wing-mounted radio repeaters that enhance communications in mountainous areas and extend communications ranges by a factor of three.

Elements of each Shadow platoon include four aircraft, two ground stations with accompanying data terminals that allow communications between aircraft and the ground, a hydraulic launcher on a three-quarter-ton trailer, automatic landing system, and four One System Remote Video Terminals, which allow warfighters on the ground to directly receive the Shadow downlink.

"That's why I refer to it as a tactical system," Reid said. "It's all about getting information to the warfighter at the tactical edge—the guys kicking down the door or going into a village in a small squad or platoon. Shadow is overhead and providing those soldiers with a tremendous amount of oversight and decision-making assistance so that they can make the right decisions about where to go or how they need to [exit] a situation. I think that's what has made Shadow so great: that very close relationship between warfighters at the edge and the system overhead, operated and commanded locally by that same brigade."

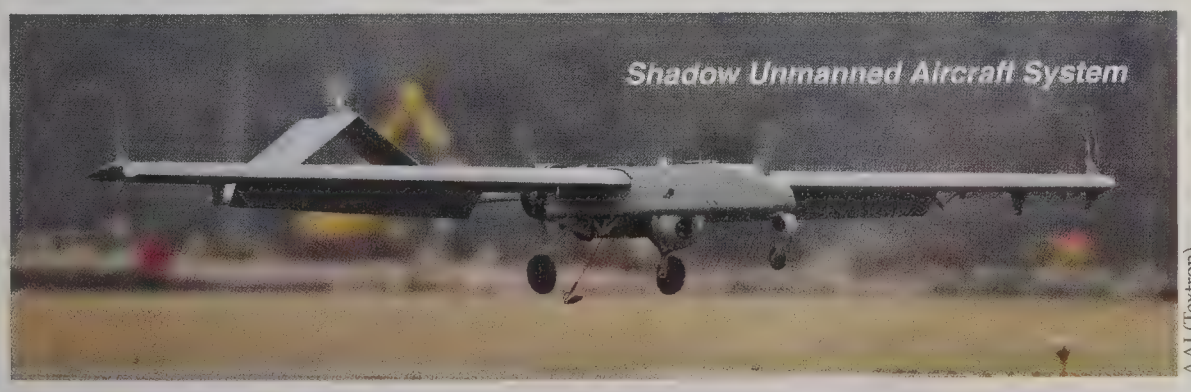
Highlighting what he called the expeditionary qualities of the Shadow system, Reid added that all system elements are carried on C-130 transportable Humvee transport/trailer platforms. "We pride ourselves in packaging a pretty substantial amount of performance in a pretty small footprint," he said.

According to Reid, Shadow emerged in U.S. Army applications in the late 1990s, when the Army and the Navy went in separate directions with their UAS requirements. The Army path led to a 1999 competition that originally drew seven competitors, followed by a down-selection to four competitors that conducted a three-week "fly-off" demonstration at Fort Huachuca, Ariz. AAI emerged from the process with a contract award that December. The first system was delivered less than a year later, with subsequent testing leading to a production decision in 2002.

"The original acquisition objective at that time was 41 Shadow systems, with four aircraft per system," he said. "To date, we have now delivered 117 systems. There are a few reasons for that. First, the Army substantially increased its acquisition objective. Also in 2007 the Marine Corps chose to retire the Pioneer—a product we had supported since the mid-1980s—and moved over to the Shadow. So the Marines are now flying 13 Shadow systems. There are also 30 National Guard units that fly Shadow, and there are also special operations command units that fly Shadow."

In addition to its significant operational tempo in combat operations, another ongoing fleet activity is the Tactical Common Data Link (TCDL) modification program. TCDL moves Shadow from analog to digital, meeting congressional encryption mandates and supporting interoperability with U.S. and NATO aircraft.

"The TCDL and the creation of the all-digital Shadow are very important," Reid said. "We are under contract for the initial 23 systems. There is also a contract action we are working



AAI (Textron)

AAI (Textron)

The Shadow "re-wing" has a wingspan of 20 feet.

Scott R. Gourley

now for another 45 systems. So we are rapidly transitioning into production of that very important engineering change proposal that brings us all that interoperability with everything else that the Army flies."

The new year will also mark the completion of the Shadow "re-wing" activity, a program that extends Shadow wingspan from 14 to 20 feet. The larger wings not only carry the additional capabilities of TCDL but also carry additional fuel. The net result is a dramatic increase in mission duration from the current 5½ to 6 hours to 9 to 10 hours.

The longer wings also include "hard point" mountings. While the Marine Corps is currently working on a program to "weaponize" Shadow via these hard mounts, there is no similar Army requirement at this time. Reid pointed to a number of company developments, however, that could expand platform utility through the addition of new generations of wing pods, ranging from a secure cellular network to a synthetic aperture radar. The re-wing effort has also been accompanied by an upgrade to expand the Shadow EO/IR sensor to include laser designation capabilities.

"I think what's now happening is that we are seeing an 'inflection point' where we are looking at the missions that Shadow can support," Reid observed. "Traditionally it had been an EO/IR surveillance mission—basically pictures over the battlefield. Then we integrated a laser designator capability that now moves us into the strike mission. When we are teamed with an Apache, the Shadow can fly over the target and 'lase' the target; the Apache can remain at safe standoff distance, lobbing its Hellfire missile that then rides Shadow's beam down to the target. There have been engagements of that type in theater. There has also been 'unmanned/unmanned teaming,' when a Shadow has lased for a Gray Eagle that delivered the Hellfire, which rode the Shadow beam down to the target."

Reid also took the opportunity to acknowledge the contributions of several members of AAI's Shadow team, including Sierra Nevada Corporation (tactical automatic landing system), Israel Aerospace Industries' Tamam Division (payload provider, including new laser designation capability) and Rockwell Collins [formerly Athena Technologies] (several iterations of the Shadow flight computer).

"There are many other partners out there, but I think those three are particularly significant in terms of what we are trying to do, having recently shown that additional performance can get added into this modest-size package," he said.

Along with its dedication to the successful completion of ongoing upgrades, AAI's future plans for Shadow were evident in the Textron exhibit at the 2011 AUSA Annual Meeting and Exposition. That exhibit included the rollout of a full-scale model for a notional "Shadow M2." The new design features a modified air vehicle platform with new engine and capability to carry two different payload bays in a new lifting body/blended wing fuselage design.

"You start thinking about the mission sets you could do at that point, driving more and more capability into the brigade commander's portfolio," Reid explained.

He emphasized that the M2 design maintains expeditionary characteristics of the current Shadow system, utilizing current Humvee platforms and current launcher with launcher modifications. In addition, with an eye toward budgetary climates, the new wing root design would allow the complete reuse of the outboard wing panels for the current re-wing effort.

"Part of our value equation to the Army is to add substantial performance or mission enhancements but at a very modest incremental cost," he said.

While the future of the M2 concept remains to be determined, Reid summarized Shadow's importance to today's warfighter as "adding a whole new dimension and reducing a substantial amount of risk to the brigade out there on the battlefield. A number of years ago, when the technology was fairly immature, we were having a few mishaps. I characterize that period as: 'The brigade commanders used to tolerate us on the battlefield.' After the last several years and some of the vignettes and stories that you hear back from theater, now the commanders of those same brigades demand that we be on the battlefield."

"It's all about the guy out there at the pointy end of the spear," he concluded. "He is at the most risk, and he needs the best information to make the smartest decisions. With Shadow he has an overwatch aircraft that helps guide his decision-making processes and situational awareness. It just generally makes the battlefield a little bit safer for our guys to go out there and engage in what they have to do." ★

AUSA Sustaining Member Profile

IEE Inc.

Corporate Structure—Founded: 1946. President/CEO: Thomas Whinfrey. Corporate Headquarters: 7723 Kester Avenue, Van Nuys, CA 91405. Telephone: 818-787-0311. Web site: www.ieeinc.com.

The real challenge for today's weapons systems operators is managing the huge volume of data flooding their systems from divergent sources. Input from everything from smart phones, emails, text messages and the myriad Internet and other networking and social media sources can overwhelm operators unless that data is properly processed for presentation on a display in a manageable, easily understood way.

That's where IEE comes in. IEE's Human-Systems Interface (HSI) expertise applies the very latest in technology and process methodology to provide systems that enable the effective managing, displaying and controlling of critical data/telecommunications in a rugged environment. IEE integrates the most advanced windowing, multi-touch-screen interfaces, data compression/transmission techniques and other proprietary tools to yield cutting edge solutions for today's systems operators. It's the job of IEE to make their jobs easier and more effective.

IEE specializes in the design, test, support and fielding of Human-Systems Interface products used in demanding military and aerospace applications throughout the world.

Since 1946, IEE has developed an extensive product portfolio that today includes flat-panel displays, keypads and switch bezels, as well as lightweight enclosures for rugged environments with customizable, integrated control functions such as video processing, high-speed communications and power conversion.

IEE's proven HSI expertise in rugged, integrated display design includes features such as multi-mode backlighting, variable luminance levels from NVIS (near vertical incidence skywave) to high bright, optically bonded touch screens and electromagnetic interference (EMI) filters, custom antireflective/antiglare (AR/AG) coatings/films and lightweight rugged packaging. IEE's enhanced display devices range from diagonally measured 3.5 inches to greater than 24 inches.

IEE effectively integrates low- and medium-power, high performance processing elements into its system designs. Recent products include low-power integrated Advanced RISC Machines (ARM) processors that support embedded Linux and Android operating systems with a wide range of communication peripheral interfaces.

Many IEE products are fully qualified to military, environmental and EMI/EMC (electromagnetic compatibility) standards and have been field-proven for use in rugged applications, attesting to their uncompromising quality and performance. IEE's in-house design and high-volume manufacturing capabilities at its U.S. facility provide the quickest route to creative solutions for demanding military and aerospace HSI applications. IEE also provides rapid prototyping (designs in days/working models in weeks) and full-scale production, all under one roof.

IEE's standard handheld control/display unit (HH-CDU) was selected as the primary Human-Machine Interface (HMI) for a force protection/counter-IED (C-improvised explosive device) system. The HH-CDU consists of an NVIS-compatible backlit display and an MOPP-4 (mission oriented protective posture) gloved operation-compatible data entry keypad. Its lightweight, molded composite construction was perfectly matched to the reduced size, weight and power requirements for adding this system onto existing ground vehicles.

The HH-CDU's rugged design and enhanced sealing/packaging enables highly reliable operation throughout its deployment in the severe environments experienced on military ground vehicles such as Humvees and mine resistant ambush protected vehicles.

The C-IED device was manufactured, qualified and delivered under an indefinite delivery, indefinite quantity contract with delivery rates set dependent upon platform deployment schedules. IEE delivered more than 25,000 units in just 30 months, with some months exceeding 1,000 units delivered. Employees recognize with pride that their hard work and dedication are helping, in part, to protect the lives of our soldiers.

IEE has a clear vision of the future of display devices. The company's design engineers develop products that:

■ Support the latest integrated ARM processors by balancing processing performance and hardware acceleration of communication and video/graphics processing with the low power consumption critical to manportable, battery-powered operation and system size, weight, power and cooling.

■ Integrate standard software platforms to promote reuse of open-source software applications through the integration of modern embedded mobile operating systems such as Android, Linux or Windows. IEE's handheld devices support the use of the extensive library of open-source applications developed and deployed in cell phones, PDAs and tablet devices.

■ Support "thin client" Ethernet communication architectures, especially those being developed, analyzed and planned for next-generation system architectures.

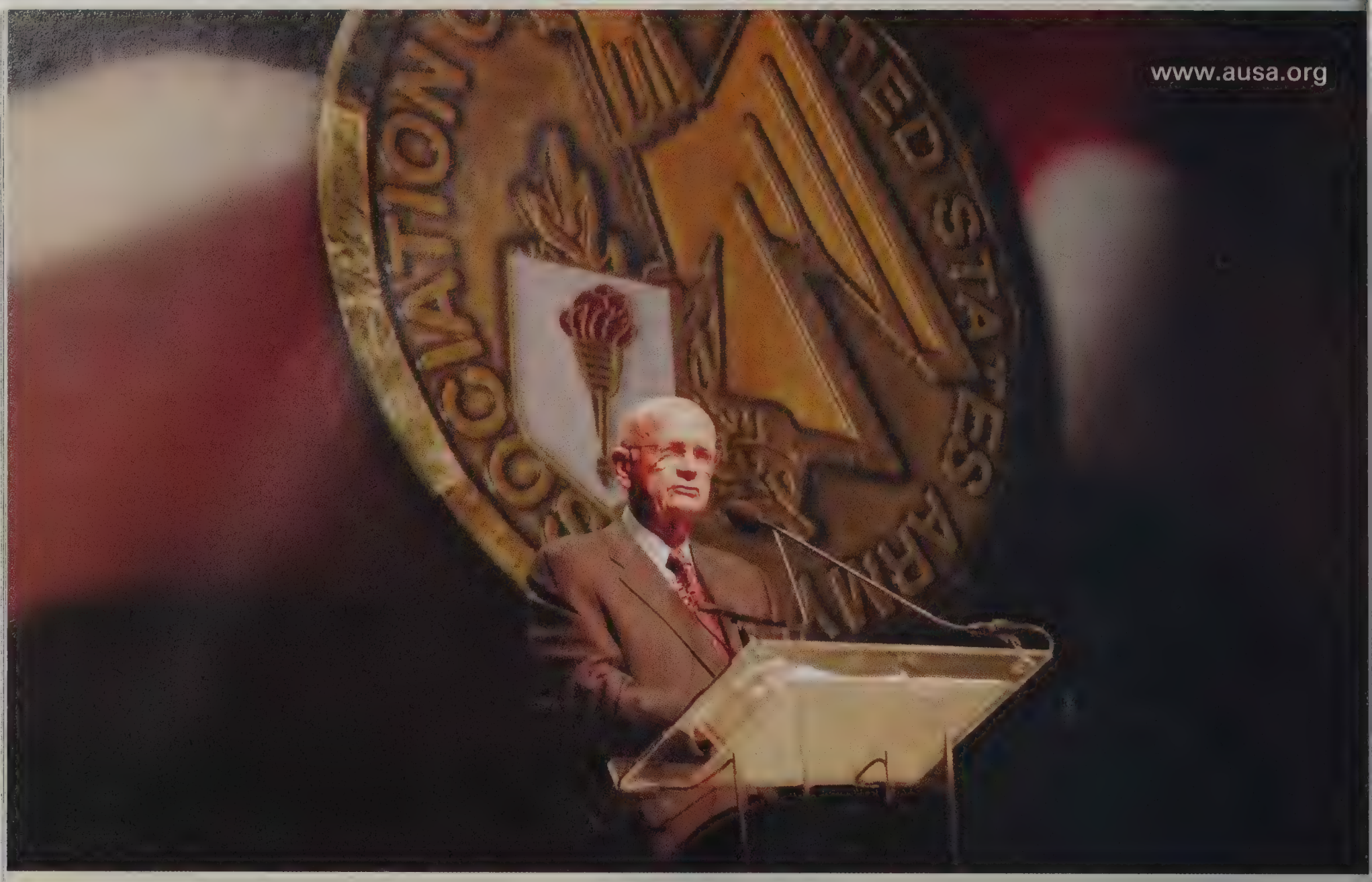
■ Extend display product offering with additional display sizes and resolutions, optional touch-screen capabilities (including multi-touch and gesturing), and contrast enhancement films and coatings.

Based on growing operational requirements, IEE's future products are segmented into three categories:

■ Handheld devices: ranging from 3.5- to 6.5-inch display sizes, with embedded low power processors such as ARM, tethered or untethered (battery-operated and wireless communication).

■ Tablet displays: ranging in size from 7 to 10 inches in standard and wide aspect ratios, typically including embedded ARM or low power x86 architecture processors, tethered or untethered (battery-operated and wireless communication).

■ Traditional and "smart" vehicular displays: ranging from 10.4 and 12.1 inches to 15 inches and beyond, in both standard and wide aspect ratios, with and without internal processing and supporting both analog and digital video interfaces.



Over 650 of the world's leading defense companies are members of the AUSA Sustaining Membership Program. Is yours?

The Association of the United States Army's (AUSA) Sustaining Membership Program is your vital link to Army decision-makers at the highest levels. As the Army's professional organization, AUSA has played a role in strengthening national security for over 60 years by facilitating partnerships between military decision-makers and industry leaders.

When you join AUSA's Sustaining Membership Program, your company's executives will have the opportunity to share ideas with top Army officials at AUSA events. These events are conducted and attended by high level Army decision-makers, DoD officials and industry leaders – the individuals who are setting the agenda for the Army's future!

Join us today and discover what the AUSA Sustaining Membership Program can do for your business.

AUSA Sustaining Membership Program:

Supporting the Army–Industry Partnership

Association of the United States Army
2425 Wilson Boulevard • Arlington, VA 22201 • (703) 841-4300 ext. 389 • www.ausa.org

Reviews

'Definitive' Combat History of the 82nd

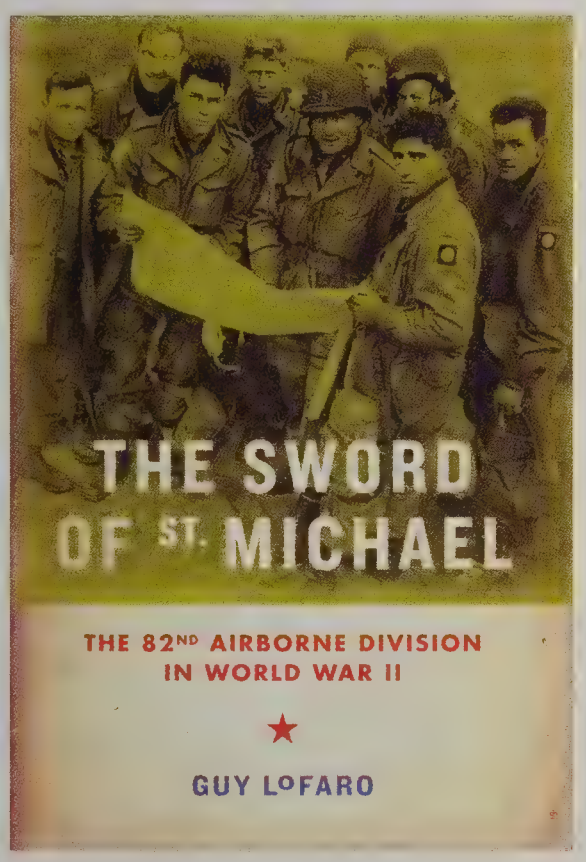
The Sword of St. Michael: The 82nd Airborne Division in World War II. *Guy LoFaro. DaCapo Press. 746 pages; photographs; maps; notes; index; $40.00.*

By COL Cole C. Kingseed
U.S. Army retired

The issue of the relative combat effectiveness between the American and German armies of World War II has long dominated the historical debate of that momentous conflict. In recent decades, a number of distinguished authors, including Russell F. Weigley (*Eisenhower's Lieutenants*), Michael D. Doubler (*Closing with the Enemy*) and Peter Mansoor (*The GI Offensive in Europe*) have examined virtually every aspect of military effectiveness. Retired Army LTC Guy A. LoFaro now joins the fray by approaching the topic from a micro level as he focuses his efforts on the 82nd Airborne Division. While the 82nd Airborne Division was not a typical U.S. Army division, LoFaro views its story as a mirror of the experience of the larger American Army of which it was a part.

LoFaro brings considerable credentials to the table in analyzing airborne warfare. A combat veteran of the division himself, LoFaro is a West Point graduate and holds a doctorate in history from the State University of New York. A 23-year Army combat veteran, LoFaro served as an assistant professor of history at the U.S. Military Academy and has conducted numerous staff rides on the 82nd Airborne Division's European battlefields. In *The Sword of St. Michael*, he has produced the definitive combat history of the 82nd Airborne Division during World War II.

The title *The Sword of St. Michael* alludes to an excerpt from John Milton's "Paradise Lost," in which the Archangel Michael procures his sword from the "Armorie of God" to smite Satan. Author LoFaro views the 82nd Airborne Division in the same light, since the All-American Division's odyssey in World War II, which included 422 days in combat in five separate campaigns, earned 15 Presidential Unit Citations



and three foreign awards (the Belgian *Fourragere*, the French *Fourragere*, and the Dutch Military Order of Willems). LoFaro's research is prodigious, encapsulating a plethora of combat interviews, official records and archival sources. One hundred and fifty pages of explanatory notes further amplify the text.

In addition to tracing the evolution of airborne warfare, LoFaro explores the impact of leadership on morale, unit cohesiveness, *esprit* and combat effectiveness, especially the brand of leadership-by-example that the division's two wartime commanders, MG Matthew B. Ridgway and MG James Gavin, embodied and demanded of their subordinates. Senior officers formed a cadre who commanded by their sheer presence and their battle acumen. All were magnetic, handsome, dynamic, well-read and ambitious. Each possessed a powerful ego and a distinct style of leadership. All were tough as steel.

Ridgway, outwardly cool, tended to personalize the war. According to Gavin, "It was always Ridgway versus the *Wehrmacht* in my mind." As for Gavin, he was that "rare commander who was not only respected, but worshiped by his men," states LoFaro, "a steely-eyed, soft-spoken commander destined for higher station." Regimental and battalion commanders mirrored Ridgway and Gavin. Reuben H. (Rube) Tucker III, commander, 504th, for example, was "a fighter who cared little for anything else." CPT (Doc) Franco, one of the 505th's regimental surgeons, "idolized" his battalion commander LTC Benjamin Vandervoort. According to Franco, John Wayne, who played Vandervoort in the movie *The Longest Day*, "was a pip-squeak compared to Vandervoort."

An unabashed admirer of the 82nd Airborne Division, LoFaro posits that the paratroopers of the division were "never sent into battle; they were led." The 82nd received its baptism of fire in Sicily, where Gavin's 505th Regimental Combat Team (RCT) held Biazzo Ridge against determined and repeated German attacks. When GEN Mark Clark's Fifth Army was stalled at Salerno the following September, the immediate drop of Tucker's 504th RCT provided "a brilliant expedient" and reversed the tide of battle. A night drop on D-Day added to the division's legacy as Ridgway led the 82nd during 33 consecutive days in combat, fulfilling every mission and never surrendering an inch of ground. In September 1944, the 82nd, now under Gavin's direct command, conducted its fourth combat jump and seized the vital bridge at Nijmegen in the abortive Operation Market-Garden.

It was during the Ardennes Offensive (December 1944 through January 1945), however, that the 82nd demonstrated its potency as one of the Army's premier combat divisions. Rushed into battle as part of GEN Dwight Eisenhower's strategic reserve, Gavin deployed his division to Werbomont, Belgium, astride the northern shoulder of the "bulge" in the hopes of constraining the enemy penetration of American frontlines. Overshadowed by the 101st Airborne Division's heroic stand at Bastogne, the 82nd Airborne Division proved indispensable in the Allied victory.

Before the war's end, the 82nd's paratroopers helped crush the Ruhr pocket and later received the surrender of the 21st German Army commanded by *General der Infanterie* Kurt von Tippelskirch. For the 82nd, the war was over, and the division turned its attention to processing the thousands of persons passing through its line. The final chapter was written on January 21, 1946, when the proud troopers of the 82nd Airborne Division stepped off from beneath New York City's Washington Arch and headed up Fifth Avenue for a final victory parade, a fitting welcome for the renowned division.

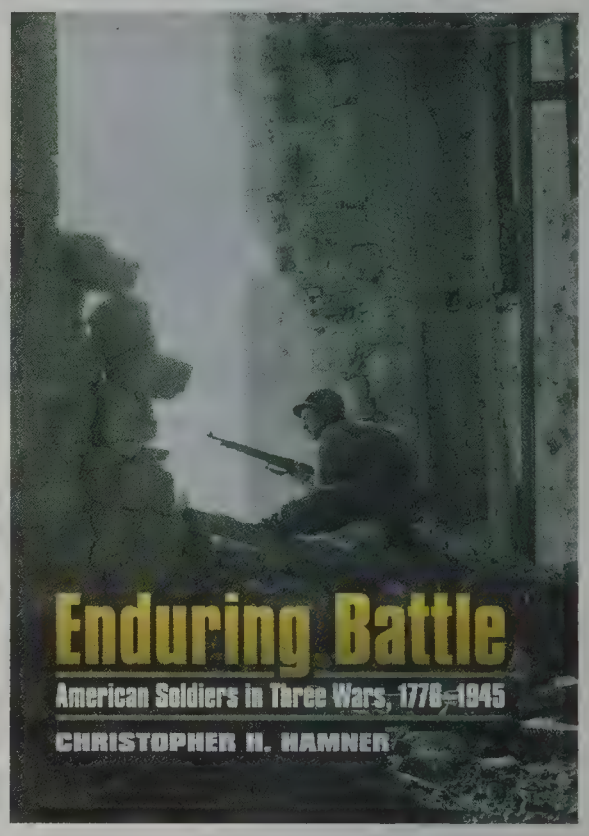
LoFaro concludes his narrative with an incident that he feels best exemplifies the fighting spirit of the American paratrooper. With First U.S. Army in retreat during the opening days of the Battle of the Bulge, a column of American tanks came upon a lone bazooka gunner in a snow-covered bunker. The lead tank commander leaned over his hatch to inquire where the American lines were. The bazooka gunner, a private from the 525th Glider Infantry Regiment, replied, "You've just arrived at the American front lines, pal. Now you just pull your tank up behind me. I'm the 82nd Airborne Division, and this is as far as the bastards are going."

COL Cole C. Kingseed, USA Ret., Ph.D., a former professor of history at the U.S. Military Academy, is a writer and consultant.

Varied Fare

Enduring Battle: American Soldiers in Three Wars, 1776–1945. *Christopher H. Hamner. University Press of Kansas. 296 pages; index; $19.95.*

There is probably no better time to refresh the old debate on why we fight. America has been at war for a decade. The nation that was not supposed to tolerate long wars has struggled through two long, messy and frustrating ones. These wars were unexpected. They were fought unexpectedly.



America fought them with an all-volunteer military not well designed or prepared for the totality of either conflict, but recruiting and retention never slowed the armed forces down. Scholars will be studying this achievement for decades.

In *Enduring Battle*, Christopher Hamner looks at three case studies, surveying the combat infantry experience in the American Revolution, the Civil War and World War II. He proposes a conceptual model for understanding combat motivation that argues context matters. As the technology of war changed, training, conditioning, leadership and other factors that influence organization and performance adapted to field soldiers who would fight rather than flee.

Hamner makes the case that changes in the lethality of weaponry cause armies to change how they motivate soldiers to fight.

A review of *Enduring Battle* in *The Wall Street Journal* says the book places too much emphasis on the role of technology. It is a fair criticism.

War is a complex activity. Technology is only one factor. Suggesting that one variable has a linear effect on a complex, competitive environment is not very convincing.

Culture clearly plays a significant role in combat motivation. Overwhelming the ranks of today's American Army are middle-class citizens from rural communities.

If culture did not play a factor, then the make-up of the Army might be much more diverse than it is. If economy determined who joins the all-volunteer force, then the military ought to be packed with poor unemployed kids from the cities. It is not. Of course, in part it is clear that the Army is filled with middle-class kids from rural America because they best fit the demographic the military is looking for in terms of education, health, weight, and so on.

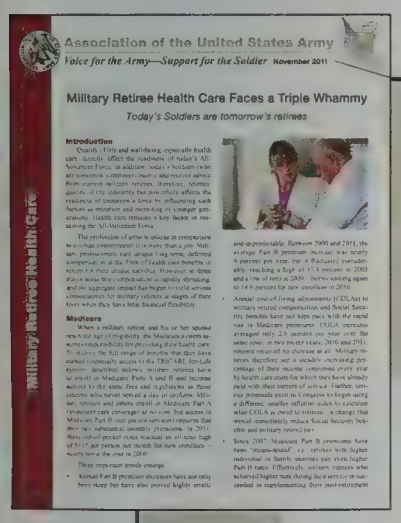
The point, however, is that this desirable demographic is showing up and staying in the force. They have a propensity to fight for their country.

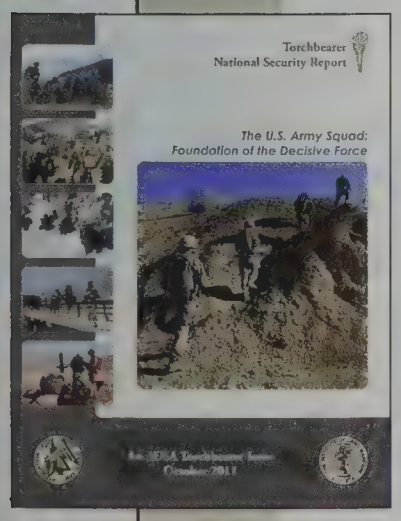
What may be more pressing for the military to worry about in the future is not why they fight, but will they stay after the fighting is done? Leading warriors in peacetime is no insignificant challenge.

When fighting ramps down in Iraq and Afghanistan, will soldiers want to stay in the armed forces? Understanding combat motivation may help answer that question as well.

Enduring Battle offers a fresh opportunity to engage in a timeless debate —an essential element of understanding military history and grappling with contemporary military affairs.

—James Jay Carafano


Association of the United States Army
Voice for the Army—Support for the Soldier November 2011
Military Retiree Health Care Faces a Triple Whammy
Today's Soldiers are tomorrow's retirees
Introduction
Medicare
Military Retiree Health Care


Torchbearer National Security Report
The U.S. Army Squad: Foundation of the Decisive Force

Help AUSA continue to be the Voice for America's Army

The Institute of Land Warfare (ILW), the educational arm of AUSA, publishes papers and Torchbearers that educate the Administration, Congress and the general public on issues directly affecting America's Army and our Soldiers.

The printing of these papers costs money and ILW, as a non-profit, must depend on contributions. Help ILW continue to ensure that America has the strongest Army possible and that our Soldiers are taken care of.

For more information, please contact Millie Hurlbut at 703-907-2679 or mhurlbut@ausa.org.

THE INSTITUTE OF LAND WARFARE • A U S A •

ASSOCIATION OF THE UNITED STATES ARMY

USA PAVILION

AT SOFEX 2012

7 – 10 MAY 2012

Book Your Space Now for the USA Pavilion

For USA Pavilion information and stand booking contact:

LexaLynn Hooper
Manager, USA Pavilion
T: +1 703 907 2666
E: lhooper@ausa.org

Amy Frankenstein
Sales, USA Pavilion
T: +1 703 907 2413
E: afrankenstein@ausa.org

www.ausa.org

SOFEX JORDAN

ASSOCIATION OF THE UNITED STATES ARMY

U.S. COMMERCIAL SERVICE
United States of America
Department of Commerce

Historically Speaking

The Not so New 'New Way of War'

By BG John S. Brown
U.S. Army retired

As I write this article, a number of commentators and pundits have expressed considerable satisfaction with battlefield developments in Libya. Some go so far as to envision a "new way of war," wherein the United States is spared the messiness of ground combat because airpower can tip the scales in overseas quarrels without actually involving our own soldiers. Theorists have been here before, of course, ever hopeful that technology can somehow eliminate the risk, sweat and blood so often required of our soldiers. Such theories have failed in the past, largely for reasons likely to remain with us for years to come.

In World War II, air enthusiasts opined that strategic bombardment could bring Germany to its knees before the first American soldier went ashore in France. In fact, indicators of German combat power, such as tank production, continued to rise until Allied forces began overrunning industrial facilities on the ground. The thin waist of Korea led some to believe they could choke off Chinese power with an air interdiction campaign, even as communist artillery tubes along the main line of resistance grew steadily in numbers throughout the war. Air interdiction of the jungle-clad Ho Chi Minh Trail during the Vietnam War proved to be even more of a forlorn hope. The steady upward trend of North Vietnamese battalions operating in the south was only interrupted by severe losses associated with the Tet Offensive, and during the time frame of the Cambodian incursion. Prior to Operation Desert Storm, a plan labeled Instant Thunder suggested Iraq could be forced out of Kuwait with 4,200 attack sorties in six days. In actuality, 42,000 strikes over 43 days, while devastating Iraqi air defenses, command and control, and logistics, destroyed relatively few of the dug-in Iraqi ground forces and their forward stockpiles. Tellingly, our pilots became at least three times as effective at "tank plinking" once our ground attack flushed the Iraqis out to create targets. Similarly, postconflict assessments of the war in Kosovo indicate that airpower inflicted significant damage on the civil and commercial infrastructure of Serbia—and its Chinese Embassy—but did little to arrest the rampage of soldiers and para-militaries in Kosovo itself.

Successive cohorts of airpower enthusiasts have tended to believe that the latest advances in technology have somehow overcome the encumbrance of past experience. This might be true if our adversaries were nonadaptive, allowing our capabilities to advance whereas theirs do not. Disciplined use of cover, concealment, decoys and innovative tactics has benefitted our adversaries in the past. When coupled with technological improvements on their own part, such disciplines have kept pace with our advances in capability. In World War II, the German 88, although formidable, had limited range and accuracy. Coming in "on the deck" was a feasible option for fighter-bombers. By the Korean War the ZSU-23-2 anti-aircraft gun had forced our flyers up several thousand feet, by the Vietnam War the SA-2 Guideline more than 10,000, and by Kosovo the SA-6 Gainful more than 15,000. At those altitudes precision-guided munitions are not a virtue; they are a necessity.

Soon, air-breathing altitude alone will be insufficient protection, although cruise missiles and unmanned aerial vehicles (UAVs) offer the option of bloodlessly returning to flying "on the deck." Cruise missiles and UAVs,

National Archives

During World War II, the first big raid by the 8th Air Force was on an aircraft manufacturing plant at Marienburg, Germany.

U.S. Air Force/SSgt. Michael D. Gaddis

A Navy F-14 Tomcat armed with two AIM 9 Sidewinder missiles, a Paveway II laser-guided 2,000-pound bomb and LANTIRN Pod moves in for refueling before conducting a bombing mission over Afghanistan in support of Operation Enduring Freedom in November 2001.

however—even fast ones—can be shot down, spoofed or electromagnetically compromised. One presumes this will be even more true in the future than it is now. Such historical stasis is premised on American air supremacy. If we don't have it, everything becomes much harder.

New-way-of-war advocates sometimes gloss over the fact that our airpower in contests such as Libya (2011), Afghanistan (2001) and Kosovo (1999) required cooperating ground forces to be effective. The ground combatants were not ours, nor were they particularly capable, but they were sufficiently on par with those they were fighting to momentarily fix them—and to turn them into targets. Actual forces on the ground control events in a manner that pilots never can. NATO was sufficiently aware of this to insist on occupations in both Bosnia and Kosovo, enforcing resolutions in line with its objectives and international law. In Afghanistan, at Tora Bora, we rediscovered the disadvantages of relying on troops other than our own. We never committed enough troops on the ground in Afghanistan or Iraq to actually control events, although at our high points we have had leverage. We are now leaving the Libyans to their own devices; hopefully they will work things out satisfactorily.

*BG **John S. Brown**, USA Ret., was chief of military history at the U.S. Army Center of Military History from December 1998 to October 2005. He commanded the 2nd Battalion, 66th Armor, in Iraq and Kuwait during the Gulf War and returned to Kuwait as commander of the 2nd Brigade, 1st Cavalry Division, in 1995. He has a doctorate in history from Indiana University. His book,* Kevlar Legions: A History of Army Transformation 1989–2005, *was recently published.*

A hands-off approach in such places as Libya and Afghanistan may well comport with our national interests, as our stakes in each are not particularly high—other than forcing terrorists with international aspirations to keep their heads down. This is not true everywhere. We do have alliances to honor and vital interests to protect. We have long since discovered that this requires American boots on the ground. Allies are rarely willing to exclusively carry the burden of ground combat, drawing on American seapower and airpower alone. No democracy could commit its sons and daughters to such an unequal proposition on a long-term basis. Allies share burdens and share risks. No burdens or risks are greater than those of ground combat. Our allies rightly expect us to commit a balance of ground, air and seapower, achieving further advantages of synergy by virtue of the mix.

The advantages of balanced force structure are no secret to those who actually fight wars. I have not encountered a pilot in an actual theater who thought a war could be won from the air alone. Imbalances emerge "inside the Beltway" in endless wrangles over dollars and budgets. We are entering a season of huge cuts and downsizing, and advocates of a new way of war will see ground forces as the most suitable target for cutting expenses. We have been there before. In the aftermath of the Cold War, the U.S. Army made a creditable case for ground forces, disarming the "never again" school who opined that ground combat was a thing of the past. Analytic successes in Quadrennial Defense Reviews 1996 and 2000 saved considerable force structure before the events following 9/11 made further reductions unthinkable. Now the new way of war and "never again" are back. We need to prepare ourselves for yet another round of debate. Only the dead have seen the end of fiscal austerity. ★

Recommended Reading:

Brown, John Sloan, *Kevlar Legions: A History of Army Transformation 1989–2005* (Washington, D.C.: Center of Military History, 2011)

Haney, Eric L., *Beyond Shock and Awe: Warfare in the 21st Century* (New York, N.Y.: Berkley Publishing Group, 2006)

Stewart, Richard W., General Editor, *American Military History, Volume II: The United States Army in a Global Era, 1917–2008* (Washington, D.C.: Center of Military History, 2010)

ASSOCIATION OF THE U.S. ARMY

OFFICERS AND COUNCIL OF TRUSTEES

Chairman: Nicholas D. Chabraja; *Deputy Chairman and CEO:* Thomas W. Rabaut; Valerie L. Baldwin; HON Rudy deLeon; SMA Robert E. Hall, USA Ret.; John D. Harris II; David K. Heebner; MG Patricia P. Hickerson, USA Ret.; Linda Hudson; LTG Larry R. Jordan, USA Ret.; Marillyn A. Hewson; CSM William T. Mixon, USA Ret.; Dennis A. Muilenburg; GEN Dennis J. Reimer, USA Ret.; GEN Carl E. Vuono, USA Ret.

Vice Chairman: LTG Julius W. Becton Jr., USA Ret.; *Vice Chairman for Noncommissioned Officer and Soldier Programs:* SMA Jack L. Tilley, USA Ret.; *Vice Chairman for National Guard and Reserve Affairs:* LTG Roger C. Schultz, USA Ret.; *Vice Chairman for Retiree and Veterans Affairs:* LTG David H. Ohle, USA Ret.; *Vice Chairman for Civilian Affairs:* George T. Singley III; *President and COO:* GEN Gordon R. Sullivan, USA Ret.; *Vice President, Finance and Administration:* LTG Thomas G. Rhame, USA Ret.; *Vice President, Education:* LTG Theodore G. Stroup Jr., USA Ret.; *Vice President, Membership and Meetings:* LTG Roger G. Thompson Jr., USA Ret.; *Corporate Secretary:* Ann E. Belyea; *President Emeritus:* GEN Jack N. Merritt, USA Ret.

Region Presidents: Hank Zolla, 1st; Ronald W. Johnson, 2nd; COL John B. Rogers, USA Ret., 3rd; COL Ralph Gauer, USA Ret., 4th; Paul Wagner, 5th; COL George D. Lanning, USA Ret., 6th; COL David R. Booze, USA Ret., 7th; CPO Tom Morgan, USN Ret., Pacific; COL David R. Ellis, USA Ret., European Dept.

STAFF

Directors: *Editor in Chief,* ARMY *Magazine:* Mary Blake French; *Director of ILW Programs:* Sandra J. Daugherty; *Director of Noncommissioned Officer and Soldier Programs:* CSM Jimmie W. Spencer, USA Ret.; *Controller:* Helen I. Hegyi; *Director of Government Affairs:* William B. Loper; *Director of Marketing:* Millie R. Hurlbut, CAE; *Director of Industry Affairs:* Michael M. Scanlan; *Director of National Security Studies:* COL George P. Coan Jr., USA Ret.; *Director of AUSA Book Program:* Dr. Roger Cirillo; *Director of AUSA Family Programs:* Sylvia E.J. Kidd; *Director of Regional Activities:* COL John E. Davies, USA Ret.; *Director of Information Technology:* Norman H. Campbell Jr.; *Director of Communications*: David Liddle.

Managers and Senior Assistants: Peter F. Murphy Jr.; Valerie A. Holman; SGT Ronnie L. Gordon, USAR Ret.; LexaLynn T. Hooper; Merna Lipson; Lisa L. Atkinson; Michael P. Coleman; CSM Donald E. Thomas, USA Ret.; Alex Brody; SGM Leroy Bussells, USA Ret.; Rand Meade; SSG Donna M. Kelley, USA Ret.; Nzinga Jones; Linda Engel; Julie C. Rudowski; Kaye Culyba; Diane FitzGerald; LTC M. Isabelle Slifer, USA Ret.; COL Stanley E. Crow, USA Ret.; Maria Katindig; Angelika Ruehr; Kenneth Williams; Jill Boynton; Kevin Irwin; Meagan Bailey; Carlo O. Katindig; Justine Walsh; Douglas Schaffer; Karen E. Morilak; Elizabeth S. Moran; Nicholas Krueger; Swarna Vallabhaneni; Aaron Cathey; William Rice; LaTashia Smith.

Assistants: Elvira C. Roget, Geneva A. Hardy, Janet H. Montes, Grigoriy V. Pruzhanskiy, Ronald P. Covill, Rhonell Dawkins, Sheri L. von Briesen, Teshaka A. Stanley, Cheryl Watson, Christine Lathrop, Jhonell Ridout, Barbara Bruce, Barbara Hollis, Odetta Jenkins, Amy B. Frankenstein, Ali Muhammad, Charles Lawson, Doris Simonetti, Carroll Lewis, Christine Goedkoop, Aurora Sunga, Gaye Hudson, Jared Lieberher, Mary Wille, Je'la Dean, Alana Jewett, Connie Williams, Matthew C. Dungan-Abney, Meredith Mangas, Lorraine Wakefield, John Moyer.

* * *

INSTITUTE OF LAND WARFARE

Executive Director: LTG Theodore G. Stroup Jr., USA Ret. **Distinguished Fellow:** GEN Peter J. Schoomaker, USA Ret. **Senior Fellows:** GEN John W. Foss, USA Ret.; GEN William F. Kernan, USA Ret.; GEN Frederick J. Kroesen, USA Ret.; GEN Crosbie E. Saint, USA Ret.; GEN Leon Salomon, USA Ret.; GEN Louis C. Wagner, USA Ret.; LTG James M. Dubik, USA Ret.; LTG Thomas J. Plewes, AUS Ret.; LTG Richard G. Trefry, USA Ret.; CSM Daniel K. Elder, USA Ret.; Toni B. Wainwright.

ADVISORY BOARD OF DIRECTORS

Army Civilians

Philip E. Sakowitz Jr., Chmn.
Melinda M. Darby
Faye E. Earley
Christopher L. Friend
Barbara J. Heffernan
Mark R. Lewis
William F. Moore
Gerald J. Purcell
Diane M. Schaule
Margaret Tyree
Emily H. Vandiver
Maureen O. Viall
Toni B. Wainwright
*George T. Singley III
**LTC Isabelle Slifer, USA Ret.

Awards

LTG Arthur J. Gregg, USA Ret., Chmn.
BG Leo A. Brooks Jr., USA Ret.
LTG Charles E. Dominy, USA Ret.
MG Jerry C. Harrison, USA Ret.
SGM Todd B. Hunter, USA Ret.
MG Robert L. Nabors, USA Ret.
BG Harold W. Nelson, USA Ret.
LTG Thomas J. Plewes, AUS Ret.
SMA Kenneth O. Preston, USA Ret.
*GEN Gordon R. Sullivan, USA Ret.
*GEN Carl E. Vuono, USA Ret.
**Lisa L. Atkinson

Chapter Operations

COL Michael M. Neer, AUS Ret., Chmn.
COL David A. Appling, USA Ret.
Mary Corriveau
COL Jimmy D. Cox, USA Ret.
COL Michor M. Gentemann, USA Ret.
COL Clyde W. Glosson, USA Ret.
CW5 Robert L. Huffman
SFC Michael P. Jarrell
COL Alan D. Kruse, USA Ret.
Richard A. Lewis
LTC Dennis E. Morgan, USA Ret.
COL Thom E. Tuckey, USA Ret.
Dick Winter
COL Russell H. Davis Jr., USA Ret., Chairman Emeritus
**COL John E. Davies, USA Ret.

Finance and Audit

COL Ian T. Patterson, USA Ret., Chmn.
Dave Barber
Edward D. Dauksz
Ronald W. Johnson
Wesley F. Walters
MG Richard S. Colt, USA Ret. (Alternate)
BG Thomas A. Swidler, CAARNG Ret. (Alternate)
*GEN Gordon R. Sullivan, USA Ret.
**LTG Thomas G. Rhame, USA Ret.

Noncommissioned Officer and Soldier Programs

*SMA Jack L. Tilley, USA Ret., Chmn.
CSM Mark C. Avery, USA Ret.
SFC Mary J. Dawson, USA Ret.
CSM Andrew McFowler, USA Ret.
CSM Larry D. Pence, USA Ret., ARNG
CSM William R. Pewther, USA Ret.
CSM Roger Stradley, USA Ret.
SFC Ron Taylor, USA Ret.
*CSM William Mixon, USA Ret.
**CSM Donald E. Thomas, USA Ret.
***CSM Michael D. Schultz
***CSM Richard J. Burch

Reserve Components

*LTG Roger C. Schultz, USA Ret., Chmn.
LTC Terry L. Allbritton, USA Ret.
CSM Victor S. Angry
MG Craig Bambrough, USA Ret.
COL Jeanne Blaes, USA Ret.
MSG Michael J. Evans, USA Ret.
COL Anthony N. Kanellis
CSM Michael R. Lawrence
COL Robert T. Lynch, USA Ret.
BG Richard S. Miller
SSG Joshua R. Morrison
MG Timothy E. Orr
MG Robert Rose, USA Ret.
COL Danelle L. Scotka, USAR Ret.
LTC Gloria J. Sherman
COL Richard P. (Phil) Stage, USA Ret.
CW5 James Thompson
CW3 Mark L. Walton
**COL Stanley E. Crow, AUS Ret.
***LTG Jack C. Stultz Jr.
***MG Raymond W. Carpenter

Resolutions

CSM Douglas Gibbens, USAR Ret., Chmn.
CW5 Paul Amacher, USAR Ret.
CSM Mark Avery, USA Ret.
MAJ James Burrows, USA Ret.
MG James E. Donald, USA Ret.
LTC Richard Hawley, USA Ret.
LTC Marc Jacobson, USAR Ret.
MG Dave Kaucheck, USAR Ret.
COL Gregory King, USAR Ret.
COL Robert Mentell, USA Ret.
Dr. James Meyl, DAC Ret.
LTC Verl Miller, ORARNG
COL Michael Neer, USA Ret.
LTC Sharlee Smith, NVARNG Ret.
SGM Geri Wacker, USA Ret.
**William B. Loper

Retiree and Veteran Affairs

*LTG David H. Ohle, USA Ret., Chmn.
COL Jerome J. Comello, USA Ret.
COL Timothy P. Considine, USA Ret.
COL James E. Cunningham, USA Ret.
BG William F. (Bill) Engel, USA Ret.
COL Henry R. (Rance) Farrell, USA Ret.
MG Peter C. Franklin, USA Ret.
COL Edward S. Graham, USA Ret.
CSM K. W. Hoiseth, USA Ret.
CSM William O. (Bill) Morgan, USA Ret.
LTC Jeffrey L. Pinasco, USA Ret.
BG Robert G. (Gary) Sausser, USA Ret.
CSM Robert W. Van Pelt
LTC Ruff Warren, USA Ret.
CSM Tommy A. Williams, USA Ret.
**SGM Leroy Bussells, USA Ret.

Standing Bylaws

COL Duane H. Bartrem, AUS Ret., Chmn.
COL Donald J. Goulet, USA Ret.
Karen R. Lowe
**Ann E. Belyea

*Council Member
**Staff Coordinator
***Liaison

De Oppresso Liber

U.S. Army

The De Oppresso Liber statue by sculptor Douwe Blumberg was unveiled and dedicated at the Winter Garden Hall in Two World Financial Center near Ground Zero, New York City, on Veterans Day 2011. Translated from Latin, the motto of U.S. Army Special Forces means To Free the Oppressed. Members of Task Force Dagger—a special operations team made up of Green Berets from 5th Special Forces Group (Airborne), aircrew members from the 160th Special Operations Aviation Regiment (Airborne), and combat controllers from Air Force Special Operations Command—joined in the ceremony.

Combat Deployed

The U.S. Army's Gray Eagle unmanned aircraft are on the job and contributing to battlefield success, providing Soldiers with superior situational awareness for even greater combat effectiveness.

Gray Eagle airborne endurance, Lynx Multi-mode Radar, and streaming EO/IR video enable persistent surveillance, swift target identification, and time-sensitive precision strike. Fielded more than a year ahead of Army requirements, the latest aircraft variant is equipped with a heavy-fuel engine for simplified battlefield logistics, TCDL line-of-sight and Ku SATCOM communications, communications relay, auto takeoff and landing, and control from the Army's One System GCS. Gray Eagle can be armed to carry four Hellfire missiles.

A powerful combat multiplier, Gray Eagle is already earning its place as the most sophisticated, reliable, and capable aircraft in the U.S. Army's UAS inventory.

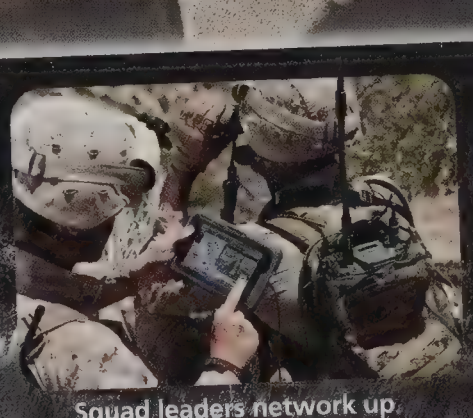
GENERAL ATOMICS
AERONAUTICAL

©2012 General Atomics Aeronautical Systems, Inc. www.ga-asi.com Ensuring The Battlefield Awareness Overmatch

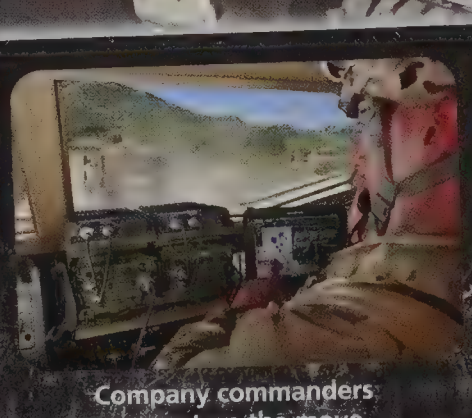
Delivering the network.

Introducing the Harris AN/PRC-152A. Keeping the frontline connected.

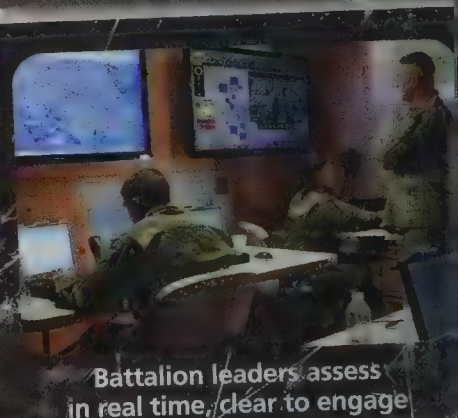
Dismounted troops send data with secure wideband



Squad leaders network up and down the command chain



Company commanders connect on the move



Battalion leaders assess in real time, clear to engage

The world's first handheld radio with both Type-1 wideband networking and narrowband interoperability. The NSA-certified Harris AN/PRC-152A gives today's warfighters secure access to voice, video, and data. Learn how Harris delivers the network to all echelons of the battlefield at Harris.com/Delivers

harris.com

HARRIS®

assuredcommunications®

The Magazine of the Association of the United States Army

ARMY

February 2012 www.ausa.org $3.00

lucation Periodicals PERIODICAL
55.05 UNC
(62, no. 2 (2012)
A

**********AUTO**ALL FOR ADC 604
116399 20120531 20120201
|||.....|||.|||.....|||.|||.|||.....|||.....|||.|||.|||.....|
0001
ACQUISITONS DEPT.C03335932
003443
ACQUISITONS DEPT.C03335932
S000278
12 LIB UNIV OF IL
01:051859
1408 W GREGORY DR
URBANA IL 61801-3607

PROTECT TROOPS FROM HARM.

With the new Bobcat® Loader Radio Remote Control System, troops can operate Bobcat loaders without being in the cab. The frequency hopping spread spectrum technology allows troops to control Bobcat loaders within line of sight from up to 500 meters away. The system can be changed from traditional in-cab operation to remote operation in a matter of minutes. The tough, dependable Bobcat loaders provide another solution to adapt to changing threats, do more complicated jobs with fewer soldiers and protect the safety of our troops. Bobcat is delivering on the military's future need for remotely operated vehicles today. Now available through DLA and GSA contracts.

www.bobcat.com/remote **1.877.505.3580**

Bobcat® and the Bobcat logo are registered trademarks of Bobcat Company in the United States and various other countries.
©2012 Bobcat Company. All Rights Reserved. | 834P-6

Bobcat
One Tough Animal

ARMY MAGAZINE

VOL. 62, NO. 2 | February 2012

PUBLISHED BY THE ASSOCIATION OF THE U.S. ARMY

FRONT & CENTER

More on Learning *By GEN Frederick J. Kroesen, USA Ret.* ***Page 15***

Asia-Pacific First: What Does this Actually Mean? *By LTG James M. Dubik, USA Ret.* ***Page 16***

Maybe It's Time to Channel George F. Kennan *By Richard Hart Sinnreich* ***Page 20***

The Strategic Importance of U.S. Forces in Europe *By LTC Chris Budihas* ***Page 21***

What's 'Back to Basics'? *By COL Chad B. McRee* ***Page 23***

FEATURES

Tomorrow's Training Technologies—Today
By Scott R. Gourley
The Army's new Dismounted Soldier Training System, slated for fielding this year, uses the latest simulation technology in training individual soldiers at the squad level. ***Page 24***

U.S. Army Europe:
A Strategic Enabler for the Northern Distribution Network
By Randal Kendrick, Richard Hawkins and Brian Swan
For nearly seven years, U.S. Army Europe logisticians have provided a viable shipping alternative for moving materiel to and from deployed forces in Afghanistan. ***Page 28***

Iraq: The Homecoming
The colors and convoys have returned home from Iraq, signifying the completion of the second longest war in U.S. history. ***Page 32***

The Mission Command Center of Excellence:
Driving Institutional Adaptability
By BG Charles A. Flynn and BG Wayne W. Grigsby
A year after implementation, the Mission Command Center of Excellence is supporting the Army's reinforcement and reconstitution as it reassesses how it will execute its roles, responsibilities and missions in the future. ***Page 36***

NIE 12.1
By Scott R. Gourley
Network Integration Evaluation, a biannual training exercise held last fall, evaluated deliberate and rapid acquisition solutions while simultaneously testing the capabilities of the Army's tactical network. ***Page 44***

Company Command—Building Combat Ready Teams:
Read2Lead: The Professional Reading List by and for Company-level Officers
Ten of the top 50 books on the Army's Read2Lead list are discussed by company-level officers in this monthly online forum. ***Page 51***

DEPARTMENTS

Letters 3
Advertisers in This Issue 4
Washington Report 5
News Call 7
Soldier Armed 57
Sustaining Member Profile 60
Reviews 61
Historically Speaking 66

WELL EQUIPPED.
FULLY
EMPOWERED.
DRS soldier systems equip modern warfighters with the very latest in sustainment, situational awareness, target acquisition, hand-held computing, communications and network services. Empowering them to make safer, smarter and more fully informed decisions. Regardless the situation.
Safety. Sustainment. Situational Awareness. That's Go To.
DRS.com/equipped
DRS
TECHNOLOGIES
A Finmeccanica Company

GEN Gordon R. Sullivan, USA Ret.
President, AUSA
LTG Theodore G. Stroup Jr., USA Ret.
Vice President, Education, AUSA

Mary Blake French — *Editor in Chief*
Paul W. Bartels — *Art Director*
Larry Moffi — *Managing Editor*
Dennis Steele — *Senior Staff Writer*
Toni Eugene — *Associate Editor*
Joseph L. Broderick — *Production Artist*
Jeremy Dow — *Assistant Editor*
Katharine Scott — *Assistant Editor*
Jocelyn Wascher — *Editorial Assistant*
Contributing Editors
GEN Frederick J. Kroesen, USA Ret.; LTG James M. Dubik, USA Ret.; and Scott R. Gourley

LTG Thomas G. Rhame, USA Ret.
Vice President, Finance and Administration, AUSA

James E. Burke — *Advertising Manager*
Meagan B. Bailey
Advertising Production Manager

Norman Campbell — *Fulfillment Director*
Valerie Holman — *Fulfillment Manager*

ARMY is a professional journal devoted to the advancement of the military arts and sciences and representing the interests of the U.S. Army. Copyright©2012, by the Association of the United States Army. ☐ **ARTICLES** appearing in ARMY do not necessarily reflect the opinion of the officers or members of the Council of Trustees of AUSA, or its editors. Articles are expressions of personal opinion and should not be interpreted as reflecting the official opinion of the Department of Defense nor of any branch, command, installation or agency of the Department of Defense. The magazine assumes no responsibility for any unsolicited material. ☐ **ADVERTISING**. Neither ARMY, nor its publisher, the Association of the United States Army, makes any representations, warranties or endorsements as to the truth and accuracy of the advertisements appearing herein, and no such representations, warranties or endorsements should be implied or inferred from the appearance of the advertisements in the publication. The advertisers are solely responsible for the contents of such advertisements. ☐ **RATES**. Individual memberships and subscriptions payable in advance (one year/three year): $21/$63 for E1-E4, cadets/OCS and GS1-GS4; $26/$71 for E5-E7, GS5-GS6; $31/$85 for E8-E9, O1-O3, W1-W3, GS7-GS11 and veterans; $34/$93 for O4-O6, W4-W5, GS12-GS15 and civilians; $39/$107 for O7-O10, SES and ES; life membership, graduated rates to $525 based on age; $17 a year of all dues is allocated for a subscription to ARMY Magazine; single copies, $3.00. Additional postage to all foreign countries, $15 per year. For other rates, write Fulfillment Manager, Box 101560, Arlington, VA 22210-0860.

ADVERTISING. Information and rates available from the Advertising Production Manager or our advertising representatives, who are:

The Audit Bureau

James E. Burke and **Irene Lamar**, 230 Park Ave., Suite 1546, New York, NY 10169. (212) 697-2844. FAX (212) 682-1421. E-mail: advdpt@aol.com.

ARMY (ISSN 0004-2455), published monthly. Vol. 62, No. 2. Subscription $34 a year. Publication offices: Association of the United States Army, 2425 Wilson Blvd., Arlington, VA 22201-3326, (703) 841-4300, FAX: (703) 841-3505, e-mail: armymag@ausa.org. Visit AUSA's web page on the Internet at www.ausa.org. Periodicals postage paid at Arlington, Va., and at additional mailing office.
POSTMASTER: Send address changes to ARMY Magazine, Box 101560, Arlington, VA 22210-0860.

Letters

'Restoring Learning'

■ We, the staff and faculty of the U.S. Army Force Management School could not agree more with GEN Frederick J. Kroesen's article, "Restoring Learning" in the December 2011 issue. Having taught "How the Army Runs" to more than 37,000 students ranging from sergeant first class to four-star general, the recurring comment remains, "I wish I'd had this much earlier in my career." Moreover, we agree with GEN Kroesen that the Army must invest in the education of its soldiers and that returning to the days of a robust educational system is "an absolute essential."

As the Army shifts its priorities and resources from the Middle East to redeployment and restoring disciplined garrison operations, it, too, must return to the basics of educating its soldiers of all ranks. Given the fiscal challenges ahead, the Army would be well-served to pay particular attention to helping its soldiers and leaders understand the players, processes, products and, most important, the right questions to ask when gaining an understanding of, and appreciation for, how the Army runs.

Soldiers and leaders interested in learning more about force management education may contact the Army Force Management School at 703-805-4901 or view our offerings at www.afms1.belvoir.army.mil/.

The U.S. Army Force Management School
Fort Belvoir, Va.

■ Once again GEN Kroesen has put his pen to an important topic: the need for the members of the profession of arms to understand the systems and processes used by the generating force to accomplish the missions assigned to the Secretary of the Army in Title 10. We are proud that GEN Kroesen identified the U.S. Army War College text, *How the Army Runs: A Senior Leader Reference Handbook* as a key source of this information.

The text is intended to be a practical guide to the systems and processes as they are currently used at the department headquarters and Army command levels to recruit, organize, supply, equip, train, mobilize and demobilize the force. The text has maintained this practical orientation since the mid-90s, when an era of scarce resources triggered collaboration between two institutions, the Army War College and the Army Force Management School, to cooperatively develop the text. This synergistic approach has created a volume that has been updated every two years ever since. We solicit input from appropriate practitioners about how the processes are actually running and do our best to make it accurate at the time we cut off updates—March 2011 for this edition.

Texts are produced in both electronic and print form and are distributed to students at both institutions. It is available electronically on the U.S. Army War College Web page at www.carlisle.army.mil/usawc/dclm/htar.pdf, where it gets approximately 7,000 visits per day.

COL Harold W. Lord, USA Ret.
Editor, *How the Army Runs*
U.S. Army War College
Carlisle, Pa.

This Month's Cover

CPL Jose Pacheco—assigned to 1st Battalion, 28th Infantry Regiment, 4th Infantry Brigade Combat Team, 1st Infantry Division—practices rappelling techniques during the basic-mobility training phase of an exercise held at the Marine Corps' Mountain Warfare Center in northern California's Toiyabe National Forest. The soldiers employed the technical skills they learned during the subsequent force-on-force phase of the exercise. *(U.S. Army photograph)*

Morality and Ethics in the Army

■ What's the connection between a decision to torture a prisoner in the heat of combat and the message of readiness statistics at Fort Swampy? Is a rock-solid moral and ethical stance possible under the brutal war pressures faced by young commanders whose training is embedded in the flawed culture of our Army? Flawed? Yes, the Army is probably more conscious of its shortcomings and works more diligently to fix them than any other major institution, all of which—church, business, industry, civil government, sports, you name it—indulge in deep-rooted, questionable practices and live with them. And all of them hit the news.

In his hard-hitting article, "How Our Training Fails Us When It Counts" (November 2011), Kevin Bell clearly lays out the ethical and moral dilemmas facing company-grade decision makers in the heat of combat. By focusing on the hot issue of torture, he narrows his approach to manageable dimensions. The problem he addresses, though, is far greater. It's Army-wide. I believe the other services have always had a cavalier attitude toward many aspects of daily service life, fully accepting that survival in competition requires cutting corners, massaging statistics and building Potemkin training and inspection villages. As hard as we try to purify our culture, we find that the task is beyond our capabilities as human beings.

The search for absolute ethical and moral purity, however, is not the goal. Toxicity is not all that elusive. The commander who puts doubt in the minds of subordinates or peers by questionable, evasive, dishonest decisions or personal relationships destroys the essential trust on which all else depends. Self-knowledge is vital—the foundation of confident leadership. The current efforts by the Army Profession of Arms campaign and the hopefully successful implementation of 360-degree personnel evaluation and mission command are steps in the right direction, but success in institutionalizing widespread total honesty is beyond human nature—and perhaps is incompatible with our goal of pushing decision authority and responsibility to lower echelons. Our study groups and theoreticians have their work cut out for them. The effort must include, but also transcend, combat training.

MG JOHN C. FAITH, USA RET.
Carlisle, Pa.

ADVERTISERS IN THIS ISSUE

AUSA Membership	8
Avon Protection	4
Bobcat Company	Cover II
DRS Technologies, Inc.	2
Harris RF	Cover IV
Navy Federal Credit Union	19
RAM Mounts	35
SRC, Inc.	Cover III

ADVERTISING. Information and rates available from the Advertising Production Manager or our advertising representatives, who are:

The Audit Bureau

James E. Burke and **Irene Lamar**, 230 Park Ave., Suite 646, New York, NY 10169. (212) 697-2844. FAX (212) 682-1421. E-mail: advdpt@aol.com.

Washington Report

President Signs Defense Spending Bill

On December 31, President Obama signed into law a defense spending bill for fiscal year (FY) 2012.

The $662 billion National Defense Authorization Act for FY 2012 provides $27 billion less than the President requested and $43 billion less than Congress authorized for FY 2011. The bill includes $115.5 billion for the war in Afghanistan and operations in Iraq and a 1.6 percent pay raise for military personnel. It also mandates that any increases in TRICARE Prime enrollment fees in any year will be tied to the cost-of-living allowance. Among its other provisions, the bill authorizes:

- Nearly $450 million for the Army's ground combat vehicle.
- Approximately $152 million for the joint light tactical vehicle.
- $31.4 million to fund the replacement of the M113.
- $255 million for the upgrade of 49 Abrams tanks in addition to 21 the Army originally requested.
- A limit to the procurement of Stryker vehicles to 100 in FY 2012.
- $2.5 billion to fund the Joint Improvised Explosive Device Defeat Organization.

The bill also contains language that gives the Chief of the National Guard Bureau a permanent seat on the Joint Chiefs of Staff.

The White House had threatened a veto over a custody provision included in the legislation that allows the military greater authority to detain and question U.S. citizens and non-citizens. The President said he signed the bill "despite having serious reservations with certain provisions that regulate the detention, interrogation, and prosecution of suspected terrorists." He noted that his administration will use its discretion to interpret the detainee provisions of the law.

A Leaner Military. In January, President Obama released a new defense strategy that will affect DoD's budget priorities and the makeup of the U.S. military for the next decade.

The strategy document, *Sustaining U.S. Global Leadership: Priorities for 21st Century Defense*, calls for at least $450 billion in defense cuts over the next 10 years. It calls for a shift in emphasis from Europe, Africa and Latin America to the Asia-Pacific region and a leaner force that will be agile enough to defeat an enemy in one region while committed to an operation in another. Nevertheless, "U.S. forces," it states, "will no longer be sized to conduct large-scale, prolonged stability operations."

The President released the defense strategy in a rare visit to the Pentagon, where he appeared with Secretary of Defense Leon E. Panetta, Chairman of the Joint Chiefs of Staff GEN Martin E. Dempsey and other leaders.

Although the President said that "our military will be leaner," the document lists no specifics about how many

DoD

President Obama delivered his austerity message at the Pentagon in January.

troops, or what type, will be reduced. Reuters reported that administration officials expect "Army and Marine Corps personnel levels to be reduced by 10 percent to 15 percent over the next decade," which would affect tens of thousands of troops. President Obama promised, however, to maintain U.S. military superiority.

The document does specifically state that the United States will "rebalance toward the Asia-Pacific region" and "will continue to place a premium on U.S. and allied military presence in—and support of—partner nations in and around" the Middle East. For the foreseeable future, Europe will remain the United States' principal partner in "seeking global and economic security," but that relationship will "evolve."

Defense Secretary Panetta and GEN Dempsey both stated their support of the document after its presentation by President Obama. "It is a sound strategy," said GEN Dempsey. "It's not perfect [but] it gives us what we need, in this world and within this budget."

Guard Chief Joins JCS. With the enactment of the 2012 National Defense Authorization Act, the chief of the National Guard Bureau, Air Force Gen. Craig R. McKinley, became a permanent member of the Joint Chiefs of Staff. The legislation also reestablished the position of vice chief of the National Guard Bureau at the three-star level while rescinding the two-star position of director of the Bureau's joint staff.

In addition, the law mandates that National Guard general officers be considered for command of U.S. Army North and authorizes funding for the National Guard's 65-nation, 20-year-old State Partnership Program, which links states, two territories and the District of Columbia with countries around the world.

Civilian Job Cuts. The Department of the Army will cut the size of its civilian employee workforce by some 8,700 positions by the end of September. The personnel reductions are necessary to accommodate decreased funding levels in the FY 2012 budget.

The cuts will affect eight commands and agencies in 70 locations in 37 states, including those with the largest military and civilian Army populations. Nearly 90 percent will occur within Installation Management Command, Army Materiel Command (AMC) and Training and Doctrine Command. AMC announced the elimination of 1,685 positions (1,440 of them by September 30) and the rest in fiscal year 2013.

In a DoD release, Thomas R. Lamont, Assistant Secretary of the Army for Manpower and Reserve Affairs, said, "To the maximum extent possible, the Army will rely on voluntary departures to achieve these manpower reductions." Commanders are responsible for determining where to make the cuts and organizing their workforce within the allocated budget. They are empowered to use all options available to achieve the necessary reductions while minimizing their negative impact. Among those options are voluntary early retirement authority and voluntary separation incentive payments to reduce staff numbers to the number mandated by the budget.

Flournoy Resigns. Michele Flournoy, Under Secretary of Defense for Policy, has announced that she is stepping down this month to return to private life. The first woman to serve in the position, which she has held since February 2009, Flournoy is the most senior female official in Pentagon history. She told the Associated Press she is leaving because she needs to "rebalance" her personal life after three years in the post.

Secretary of Defense Leon Panetta issued a statement praising Flournoy's efforts. "From guiding our strategy in Afghanistan and Iraq, to helping set the department's priorities and global posture through the 2010 Quadrennial Defense Review as well as the strategy review that has been under way this year, Michele has made a strong and lasting positive imprint on this department and on our nation's security."

Flournoy's husband, W. Scott Gould, is deputy secretary of the Department of Veterans Affairs.

2012 BAH Rates. In December, DoD released the 2012 Basic Allowance for Housing (BAH) rates, which took effect January 1. Overall rates increased an average of 2 percent resulting in average increases in BAH of approximately $39 a month for members with dependents. The BAH for a typical E-6 with dependents, for example, is now about $35 a month higher, and an O-3 with dependents receives an increase of about $40.

In locations where the rates decrease, the drop applies only to newly reporting members. Members receive the increase if the rate increases, but all have individual rate protection that ensures personnel already assigned to a given area see no BAH rate decrease. That provision protects people who have made long-term commitments in the form of a lease or contract from being penalized if an area's housing costs decrease.

To help servicemembers make informed decisions when relocating to a new area, DoD is publishing the average percentage breakdown of rent, utilities and renters insurance for each military housing area beginning with the 2012 BAH rates. For more information, to find a complete listing of BAH rates or to calculate individual rates, visit www.defensetravel.dod.mil/site/bah.cfm.

Absentee Voting. As voting requirements can vary by state, the Pentagon's Federal Voter Assistance Program helps servicemembers living overseas register and request ballots. Servicemembers can visit www.fvap.gov to get the specific information and forms they need to file. The Web site also provides general election mailing deadlines for absentee ballots.

Military voters may "express mail" their ballots free from any APO/FPO/DPO or American Embassy or Consulate by using Express Mail Label 11-DoD. The DoD Web site (www.defense.gov) offers information about the new label, which is available at military post offices, and explains how servicemembers can track their ballots.

News Call

Army Begins to Shift Mission in Afghanistan

With U.S. military casualties in 2011 having declined for the first time in several years, the Army welcomed the new year with a decided shift in the mission of American soldiers, who will begin to focus on advise-and-assist services similar to those that preceded U.S. withdrawal from Iraq over the past two years.

Deploying small numbers of experienced U.S. and coalition officers and NCOs within Afghan units will allow them to strengthen the Afghan forces from within while scaling down the U.S. combat mission in preparation for withdrawal by the end of 2014.

While the Pentagon had not announced future deployments when ARMY Magazine went to press in January, 4th Brigade Combat Team (BCT), 1st Armored Division, Fort Bliss, Texas, posted news on its Facebook page that senior leaders, not individual units, will deploy for nine months as "part of the transition from combat operations to advisory missions as we did in Iraq."

In addition, *Stars and Stripes* reported that three advisory units—3rd Heavy BCT, 4th Infantry Division, Fort Carson, Colo.; 2nd BCT, 3rd Infantry Division, Fort Stewart, Ga.; and 2nd BCT, 101st Airborne Division, Fort Campbell, Ky.—would deploy in the fall.

With the remainder of U.S. 2009 "surge forces" scheduled for redeployment no later than September, American military forces would number roughly 68,000 by October.

News of the shift in mission comes as tensions continue between Pakistan and Afghanistan in the border regions of Regional Command-East following a NATO night raid that killed two dozen Pakistani soldiers last November. LTG Curtis M. Scaparrotti, commander of NATO's International Security Assistance Force Joint Command and deputy commander of U.S. Forces-Afghanistan, said operations along the border with Pakistan continue.

Meanwhile, the United States continues to work with the Afghan government to find ways to negotiate a peace

U.S. Army/SPC Amber Leach

U.S. Army MAJ John Schmitt (right) of the Kentucky National Guard Agribusiness Development Team 3, demonstrates how to install a drip irrigation system in Kapisa Province, Afghanistan. The purpose of the mission was to help improve the Afghans' agricultural capabilities.

AUSA Membership Benefits

Bank of America, N.A.:
AUSA Bank Card
Start receiving great rewards and show your support for AUSA. Call 866-438-6262.

Institute of Land Warfare:
ILW offers writing programs; conducts conferences and symposia; publishes essays, Defense Reports, newsletters; and provides research on defense issues. Call 800-336-4570, ext. 630 for details.

AUSA Mastercare Group Insurance Plans:
- Active Duty & Retiree TRICARE Supplement
- Accidental Death and Dismemberment Plan
- 10-Year Level Term Life Insurance Plan
- Group Term Life Insurance Plan
- Short-Term Recovery Plan
- Long Term Care Plan

Call 800-882-5707 for more information.

Dental and Vision Discount Plans:
Discounts offered to AUSA members on dental services and vision exams.

This plan is not available in the states of MT and VT.

Emergency Assistance Plus:
If you or a family member gets injured or sick while on travel this plan will provide medical assistance, bring a medical specialist or loved one to your side and much more. Call 888-633-6450 for more information.

Government Vacation Rewards:
AUSA now offers its members discounts on cruises, resorts and tour providers.

GEICO Insurance – Auto, Home, Condo/Renters, and Boat:
In states where available, a special member discount may apply. Call 800-861-8380.

Apple Member Purchase Program:
Apple Computers offers AUSA members a substantial savings on its computers. Call 800-MY-APPLE and mention you are a member of AUSA.

Book Program:
Members receive discounts on selected military books.

Army Times/Federal Times:
Subscription discounts on Army Times/Federal Times. Call 800-368-5718.

Dell Member Purchase Program:
AUSA members can now receive discounts on Dell PCs.

AUSA Career Center:
AUSA members can now post their resumes and employers can advertise any new openings they have. Visit our Web site and go to the Resources drop-down, then Career Center.

University of Maryland University College (UMUC):
University of Maryland University College (UMUC) is pleased to offer undergraduate and graduate study programs to AUSA members worldwide. For some program participants, a discounted tuition rate will apply.

Armed Forces Services Corporation:
AFSC guides you through the details on military entitlements for your retirement and survivor planning/assistance for your spouse. Call or e-mail: 888-237-2872, info@AFSC-USA.com.

Choice Hotels International®:
AUSA members can receive discounts on hotel rooms at the following hotels.

- Comfort Inn®
- Comfort Suites®
- Quality®
- Sleep Inn®
- Clarion®
- Cambria Suites®
- MainStay Suites®
- Suburban Extended Stay Hotel®
- Econo Lodge®
- Rodeway Inn®

Call 800-258-2847 and use the code 00800700.

Car Rental Program:
Use the reservation codes on the back of your membership card and save at:

• AVIS	800-331-1441	• Hertz	800-654-6511
• Budget	800-455-2848	• National	800-Car-Rent
• Alamo	800-354-2322 *(rental for under age 25 available)*		

Publications:
- *ARMY* Magazine every month, including the October *ARMY Green Book*.
- *AUSA NEWS* every month.

Member discounts and services are subject to change.

For more detailed information visit Members Only Benefits and Services at www.ausa.org.
800-336-4570 ext. 664 • 703-907-2670

with the Taliban. In early January, the Taliban announced that its leadership had reached an agreement with Qatar and will open a liaison office there.

Promotion Rates. The end of the war in Iraq and the drawdown of U.S. forces in Afghanistan, combined with a reduction in Army end-strength mandated by former Secretary of Defense Robert M. Gates, mean Army promotion rates will slow.

In a late December email, Chief of Staff of the Army GEN Raymond T. Odierno noted that the 36.4 percent rate of promotions to the rank of colonel in the latest selection list was the lowest since 1987.

GEN Odierno said he "expects officer promotion selection rates to return [to pre-9/11] levels," roughly 90 percent to captain, 80 percent to major, 70 percent to lieutenant colonel and 50 percent to colonel. He urged leaders to be candid with their subordinates in evaluating them through informal counseling as well as formal reports and to coach and mentor leaders to be prepared for selection boards.

"Even with the soundness of our board process," he admitted, "some great officers will not be selected."

The lower promotion rate from lieutenant colonel to colonel is consistent with the reduction among general Army officers called for by former Secretary Gates last March. Current Secretary of Defense Leon E. Panetta has agreed with that plan.

Force Cuts. The Sergeant Major of the Army is telling soldiers to prepare for anticipated force reductions in the Army and that painful personnel decisions, which could shrink the Army by some 50,000 soldiers over the next few years, will need to be made.

"Right now we are at a crossroads in our Army," SMA Raymond F. Chandler III told reporters late last year. "We have continuing responsibilities overseas with our war in … Afghanistan and other places around the globe, and at the same time we are wrestling with reduced budgets, and what that impact will be on our Army—and the drawdown in the force—and how we are going to manage that transition over the next several years."

SMA Chandler said that the Army will use four tools to cut the force. First, the Army will bring in fewer soldiers. At the height of the conflicts in Iraq and Afghanistan, the Army brought as many as 80,000 soldiers a year into service. This fiscal year, the recruitment goal is about 58,000, he said.

Second, the Army will retain fewer soldiers, which means it may be tougher to re-enlist, and some soldiers who want to re-enlist may have to transfer to a new military occupational specialty (MOS) to do so.

A third tool to cut the force will be adjustment of retention control points (RCP) for sergeants and staff sergeants, according to the SMA. The RCP is a cap on the number of years a soldier may be in service without attaining the next higher rank. With planned changes to the Army's RCPs, SMA Chandler indicated that "probably anywhere from 1,500 to 1,800 sergeants and staff sergeants will end up leaving the Army earlier than they may have anticipated."

He added that the change is not because of the drawdown; rather it is because of adjustments made in leader development strategies about when people will get promoted. "We had to make some adjustments, and some folks, unfortunately, will have to leave," SMA Chandler said.

The fourth tool to reduce the force will be selective early retirements, "probably starting next fiscal year," according to SMA Chandler. The Army will conduct selective early retirement boards for sergeants first class, master sergeants and sergeants major.

"We will look at whether or not soldiers in that rank have any future potential and whether or not their MOS or career management field may be over strength, and we'll tell them that it is time to retire now instead of waiting until their mandatory retirement date," SMA Chandler said.

U.S. Army/Rob McIlvaine

New Surgeon General. *LTG Patricia D. Horoho, the 43rd surgeon general of the Army and commanding general of U.S. Army Medical Command, receives her three-star epaulets from her husband, COL Ray Horoho, USA Ret., and Army Chief of Staff GEN Raymond T. Odierno in a ceremony at Joint Base Myer-Henderson Hall, Arlington, Va., in December. LTG Horoho is the first woman and first nurse to be surgeon general and to command the Army's largest medical organization.*

"The retention piece is the one that is going to affect a lot of folks in our Army," SMA Chandler noted. "Everybody will be touched in some capacity. But for our soldiers who are eligible to re-enlist, the standard is going to be excellence. We are looking for the best and the brightest in our Army, [to] offer the privilege of service. And it is really a two-part decision," involving the soldier's own commitment to serve, and then placing soldiers where the Army needs them most.

"There are going to be some soldiers [who] are going to be afforded the privilege to stay in service, but they may have to choose a different MOS, and for some folks that may not be palatable."

The Sergeant Major of the Army said that "finding the best folks" to stay in the Army will involve using some of the same tools used to decide promotion: military education, civilian education, duty performance, and a soldier's own "desire to seek greater responsibility and other skills."

IED Simulator Training. The Army National Guard has started improvised explosive device (IED) training at Camp Atterbury, Ind., using an armored vehicle virtual reality simulator system created under the counter-IED collective and individual mounted training program.

The simulator replicates realistic conditions of an IED attack on a vehicle using smoke, noise and jarring explosions that create conditions of poor visibility and confusion. According to officials, the training system puts soldiers through realistic and psychological challenges to fully engage all the senses that affect performance and decision-making skills on the battlefield.

"It was designed because there was nothing out there to safely simulate an IED blast for soldiers," said Michael Laughead, an observer-controller with R.L. Leaders, the company responsible for developing the simulator.

The simulator system also provides a digital recording of the training session to user units so leaders and soldiers can review what was done right or wrong and how soldiers can improve performance.

The first unit to use the simulator was Provincial Reconstruction Team Kapisa, which was training for a deployment to Afghanistan.

Noncombat Heroism Honored. In a December ceremony at Fort Drum, N.Y., SGT Jacob J. Perkins, a forward observer with Headquarters and Headquarters Troop, 1st Squadron, 89th Cavalry Regiment, 2nd Brigade Combat Team, 10th Mountain Division, was awarded the Soldier's Medal for rescuing nearly 30 passengers from a burning bus last July.

SGT Perkins was en route from Fort Drum to Missouri at about 1:30 A.M. to celebrate his daughter's birthday when he spotted a flaming crash on a dark stretch of I-90 between Syracuse and Buffalo. A tractor-trailer had rear-ended a Canadian tour bus, burying itself halfway into the vehicle.

SGT Perkins hopped the median, ran across several lanes of traffic and began dragging people to safety. He repeatedly braved the growing flames and smoke to check every seat and pull passengers from the wreckage. The tractor-trailer driver died on impact, but 53 people on the bus survived, some with serious injuries.

Willie Blair, the last passenger SGT Perkins rescued, was so severely injured that he was airlifted to a hospital some 45 miles away, and SGT Perkins volunteered to drive Blair's wife, Sandy, and daughter, Michelle, there. On arrival, they found Blair had been rerouted to a hospital in Syracuse, another 90 miles distant. SGT Perkins assured Sandy Blair that it was "no problem," drove them to Syracuse and stayed with the two women until family members arrived later in the morning. "He treated us like family," Michelle said. "He refused to leave our side."

According to Army regulations, the Soldier's Medal, which ranks just below the Distinguished Flying Cross, is awarded to any person of the U.S. armed forces who, while serving with the Army in any capacity, "distinguished himself or herself by heroism not involving actual conflict with an enemy. ... The performance must have involved personal hazard or danger and the voluntary risk of life."

First Cyber Brigade Activated. The Army activated its first computer network operations brigade in a ceremony at the National Security Agency (NSA) at Fort Meade, Md., in December. The U.S. Army Intelligence and Security Command (INSCOM) created the 780th Military Intelligence (MI) Brigade with the assistance of NSA, DoD, U.S. Cyber Command, and Army and congressional staff to help U.S. and Army Cyber Commands perform their missions of providing a proactive cyber defense. The Army approved the establishment of an Army cyber brigade in December 2010.

The 780th's colors were unfurled for the first time at Fort Meade, and COL Jonathan E. Sweet took command with CSM Lawrence Hoke. COL Sweet recalled the words of MG William C. Lee, first commander of the 101st Airborne Division, who told his soldiers in 1942 that the unit "has

Army Casualties in Afghanistan

The following U.S. Army soldiers were reported killed in Operation Enduring Freedom from December 1 to December 31, 2011. All names have been released through the Department of Defense; families have been notified.

SSG Joseph J. Altmann, 27
SPC Mikayla A. Bragg, 21
SFC Clark A. Corley Jr., 35
SPC Kurt W. Kern, 24
SGT Noah M. Korte, 29
SPC Ryan M. Lumley, 21
SPC Thomas J. Mayberry, 21
SGT Christopher L. Muniz, 24
SGT Ryan D. Sharp, 28
PFC Justin M. Whitmire, 20
SPC Ronald H. Wildrick Jr., 30
PVT Jalfred D. Vaquerano, 20

U.S. Army/SGT Michael J. MacLeod

Recoilless Rifle. *A civilian instructor coaches two paratroopers (82nd Airborne Division, 1st Brigade Combat Team) on how to use a Carl Gustav M3 84 mm recoilless rifle during a certification course at Fort Bragg, N.C., last December. The multirole weapon consists of a light artillery tube that can be used against armor, fortifications and personnel.*

no history, but it has a rendezvous with destiny." The men of the 101st, said COL Sweet, "were the infantry's best of the best. They were selected, trained and deployed to counter an adversary that threatened our country during the Second World War. Like the 101st, the 780th MI Brigade has no history and was formed to counter an adversary operating in a different domain—a highly technical, man-made domain called cyberspace."

During the ceremony, MG Mary A. Legere, INSCOM commanding general, noted that the activation "is a tribute to the belief in the notion that our nation requires assured freedom of maneuver in cyberspace ... and the advent of the increasingly more sophisticated threats to our security."

Move to Germany Easier. Twice-weekly flights scheduled to begin in February from Baltimore/Washington International Airport (BWI), Maryland, to Ramstein Air Base (RAB) will ease permanent change of station moves to Germany for soldiers and their families. The flights are a new phase of the Patriot Express DoD-chartered air travel.

The new flights, contracted with all the amenities of traditional international commercial flights, will land at RAB, an airport where English is spoken and dollars are used instead of the Euro. Another benefit of the flights is that Patriot Express allows passengers to check two pieces of luggage (each weighing up to 70 pounds), more than commercial airlines allow. Personnel at RAB, who will track the flights and know of any delays, will meet arriving passengers regardless of the hour, help them clear customs and arrange military transportation to their new duty stations.

Cost for pet travel from the current duty station to BWI will vary, but the price for the international leg of the flight is expected to average about $110 per pet, a significant savings over commercial operations. A veterinarian on duty at reception operations at RAB will clear pets to enter Germany.

U.S. Army Europe and Installation Management Command-Europe plan to include Patriot Express frequently-asked-questions pages on their Web sites in early 2012. For additional information, visit www.eur.army.mil/PatriotExpress.

2012 Warrior Games. The third annual Warrior Games, in which 50 wounded, ill or injured soldiers will compete, are slated to take place in Colorado Springs, Colo., from April 30 to May 5. The soldiers selected for the Army team were scheduled to be announced in January.

Warrior Games was created in 2010

as an introduction to Paralympic sports for injured servicemembers and veterans. More than 200 athletes—drawn proportionately from the Army, Navy, Air Force, Marine Corps and Special Operations based on their disabilities—are expected to compete for gold medals in archery, cycling, wheelchair basketball, shooting, swimming, sitting volleyball, and track and field. The games are hosted by the U.S. Olympic Committee and supported by DoD, the Department of Veterans Affairs, the USO, the Fisher House Foundation and the Bob Woodruff Foundation.

All 29 Warrior Transition Units across the Army offer adaptive sports and reconditioning activities. They "play major roles in the recovery and healing process of wounded, ill and injured soldiers," according to BG Darryl A. Williams, assistant surgeon general for Warrior Care and Transition and commander of the Warrior Transition Command. "It helps them meet physical goals more quickly, and it also helps them appreciate their abilities and focus on life after injury."

The Army team took numerous medals in last year's Warrior Games, among them a gold by defeating the Marines in wheelchair basketball and 15 in swimming.

JMR Helicopter. The Army announced in December that it is leading the development of a next-generation aircraft called the Joint Multirole (JMR) helicopter. The JMR program, in the early stages of development, is a Pentagon effort that will include input as well as officials and working-group members from the Office of the Secretary of Defense, other military services, the Coast Guard, Special Operations Command, and the National Aeronautics and Space Administration.

The JMR program plans to have an approved initial capabilities document in 2013. Program goals include designing a "demonstrator" aircraft by 2013 and conducting a first flight in 2017.

Ultimately, the program will build and deliver a helicopter able to sustain speeds greater than 170 knots, achieve an overall combat range of more than 800 kilometers, and hover with a full combat load at an altitude of 6,000 feet and in temperatures of 95 degrees Fahrenheit. Other planned capabilities of the JMR helicopter are a degree of autonomous flight, successful weapons integration and compatibility, a core common architecture of electronics and sensors, and manned/unmanned teaming ability.

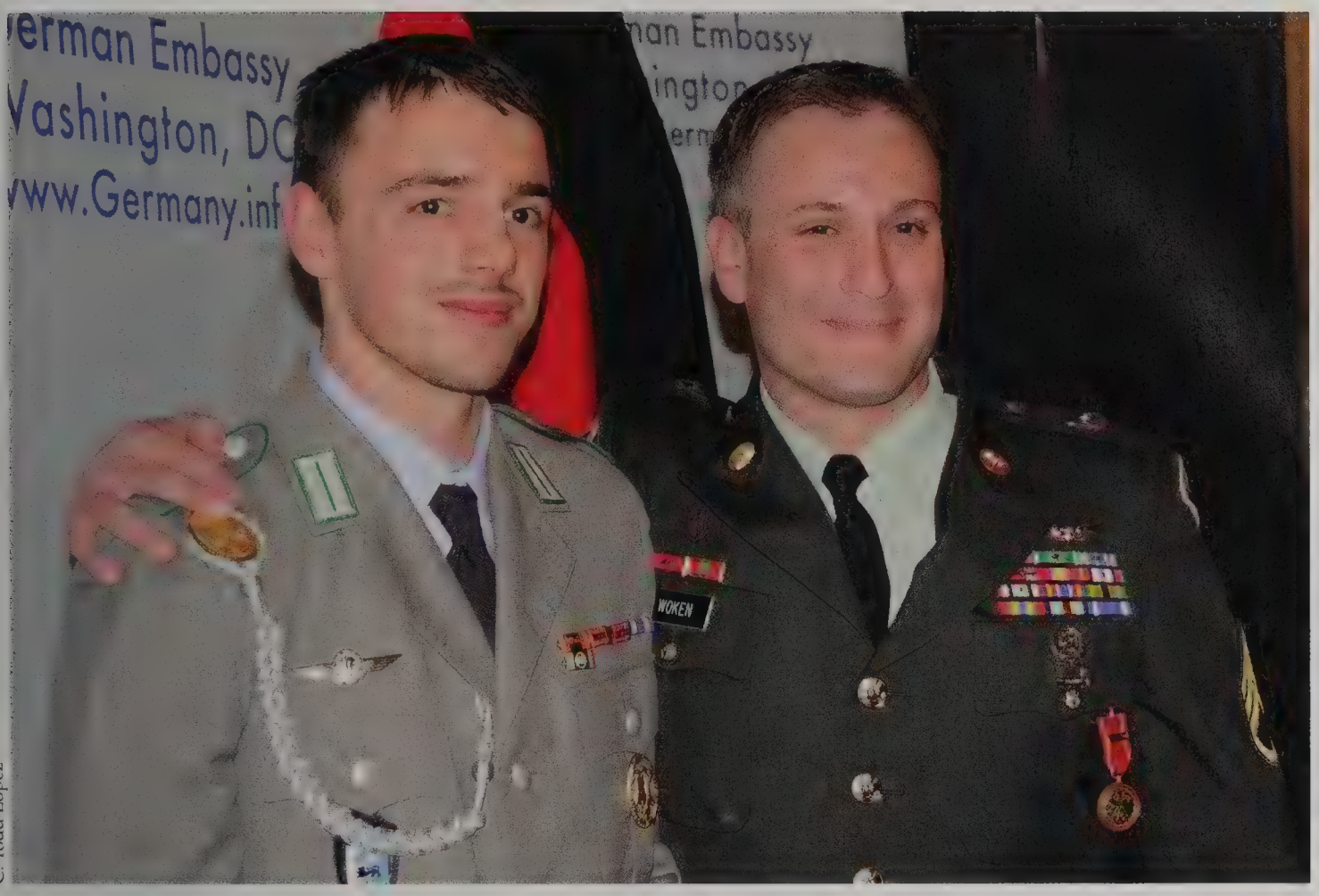
The JMR program is a subset of DoD's joint future vertical-lift effort, which includes a range of future aircraft. The JMR program will focus initially on medium-lift options able to complete a variety of missions, among them cargo, utility, armed scout, attack, search and rescue, humanitarian assistance, and special warfare support.

Various technologies are under consideration for the new helicopter. One is a coaxial rotor system that would place auxiliary propulsion devices at the rear of the aircraft to provide extra speed. Another possible configuration to gain extra speed is to equip the helicopter with two turbo-shaft engines and two small fixed wings on each side fitted with a pusher-propeller. Also under consideration is the tiltrotor, similar to that used for the Bell Boeing V-22 Osprey.

German Medal for Soldier. At a December ceremony in Washington, D.C., flight medic SSG Peter Woken received the German Medal of Honor for Gallantry in Action, an award similar to the American Silver Star, for saving the life of German Cpl. Tim Focken in Afghanistan in October 2010. Cpl. Focken was shot as he led a ground patrol near the town of Qalaye Zai, Afghanistan. An American Black Hawk medevac team landed

Spur Ride. *U.S. Army soldiers (1st Battallion, 227th Aviation Regiment) participate in a spur ride in Paktika Province, Afghanistan, last December. The spur ride is a tradition dating back to the beginning of the U.S. Cavalry, when troopers proved their tactical and technical skills, leadership, and teamwork over several days to earn the right to wear silver cavalry spurs.*

U.S. Army/SFC Eric Pahon



C. Todd Lopez

SSG Peter Woken (right) and German Cpl. Tim Focken reunited at the December award ceremony in Washington, D.C., for the first time since the latter was wounded in 2010.

under fire to pick up Cpl. Focken, and SSG Woken tended his wounds during the flight to a military hospital.

Seven other members of the Black Hawk crew received the German medal in theater. SSG Woken, now part of the Warrior Transition Unit at Fort Hood, Texas, was the first American to receive it on American soil.

Border Mission. National Guard forces serving on the United States' southern border will be reduced this year from about 1,200 troops to fewer than 300. The remaining National Guard force will focus on air surveillance support to U.S. Customs and Border Protection agents rather than providing ground surveillance support, which had previously been the priority mission.

The new air mission began in January, and the transition is expected to be completed by March. Guard soldiers will fly missions in specially equipped OH-58 and UH-72 helicopters and RC-26 fixed-wing aircraft to provide enhanced detection and monitoring capabilities to law enforcement agents on the ground.

Bliss Goes Green. In late December, the U.S. Army and Johnson Controls announced a nearly $16 million federal contract for a solar energy installation and other energy-efficiency improvements at Fort Bliss, Texas.

U.S. Army

Recruiting Vehicle. *The U.S. Army's science, technology, engineering and mathematics (STEM) vehicle, a mobile recruiting and education platform designed to help recruit civilian scientists, technicians and engineers, was unveiled during events at the January All-American Bowl in San Antonio, Texas.*

David Kamm

Each Container Unitized Bulk Equipment, or CUBE, system contains two bladders that can deliver as much as 500 gallons apiece to a forward operating base.

The project, which supports the Army's net-zero energy initiative, is the first under President Obama's executive order calling on federal agencies to make $2 billion worth of energy-efficient upgrades over the next two years using energy-saving performance contracts. The undertaking is projected to save Fort Bliss $39 million in energy costs over the next 24 years.

The improvements will be installed at Fort Bliss with no up-front costs. In all, 5,500 solar panels will be installed, as well as utility and control systems at 120 buildings and a program to reduce electricity usage during peak demand periods. Together, the energy efficiencies are projected to reduce greenhouse gas emissions by an amount equal to removing 1,280 vehicles from the road each year.

Fort Bliss, DoD's largest military garrison, is one of several Army net-zero pilot installations. The garrison's public affairs office announced that it hopes "to be energy efficient by 2015."

The CUBE Delivers. The U.S. Army's Natick, Mass., Soldier Research, Development and Engineering Center has developed the container unitized bulk equipment (CUBE) system to better deliver liquids such as water and fuel to the battlefield or humanitarian assistance locations.

Fuel and water are currently delivered in 55-gallon drums or 500-gallon blivets by ground convoy or airlift. The containers are cumbersome and take up a lot of space at small forward operating bases (FOBs), and in some cases, the empty containers need to be retrieved for refilling if tactically possible.

The CUBE system promises a more reliable and cost-effective way to transport vital liquids. The collapsible, stackable system is composed of a low-cost helicopter sling-load net, two crate-like plastic containers and two fuel blivets or water bladders, which take up less space on a FOB and are easier to transport back to logistics bases. It can be delivered by airdrop, helicopter sling-load or ground convoy. It consists of a combination of items currently in the government procurement system and off-the-shelf items. Officials said that the CUBE system could cut costs by half while providing a better delivery system. ★

U.S. Army/Steven L. Shepard

Easing Air Travel. *Transportation Security Administration officer Desiree Kalin demonstrates to SPC Victoria Grudzinski and SPC Michael Rhoades, 229th Military Intelligence Battalion, the new airport pre-screening procedures for servicemembers called for by the Risk-Based Security Screening for Members of the Armed Forces Act. Enacted in January, the new law calls for changes within six months that will expedite security screening not only for servicemembers with official air-travel orders but also, as much as possible, for accompanying family members.*

Front & Center

More on Learning

By GEN Frederick J. Kroesen
U.S. Army retired

Further thought on the importance of learning as one pursues professional competence occurred when a fellow member of the Institute of Land Warfare had occasion to search for historical records regarding the career of GEN William C. Westmoreland. His immediate sources were the files of ARMY Magazine. He found 20 references to Westmoreland's thinking—his reports, assessments, concepts and proposals. They range from 1958, when he wrote "The How of STRAC," to 1993, "Riding to Battle." Most important perhaps are his contributions during the years of his tenure as Chief of Staff, 1968–1972, because they affected the Army's path to the future.

The Westmoreland research led to the recognition that the back issues of ARMY contain a wealth of educational material that is important to our evolving bank of knowledge about fighting wars, preparing for wars and sustaining the quality of our forces. It then led to "for example" inquiries concerning other authors of note.

LTG James M. Gavin has 24 articles in the files from 1950 ("Tactical Use of the Atomic Bomb") to 1979 ("Review of Leadership"). Included are his thoughts on "Cavalry of the Sky," "Implications of the Missile Era" and other examples of what was the forward thinking of his day. He guided the Army research and development program during President Eisenhower's administration.

Another inquiry produced another list of articles by or about GEN Matthew B. Ridgway covering his thoughts and ideas from 1951, as he took command in Korea, to 1955 when he retired as Chief of Staff of the Army. He wrote or spoke about fighting the Korean War, about soldiers ("The Indispensable Weapon"), about our Army culture and about Army wives, presenting a diverse exposure sure to be interesting and educational.

There are scores of other authors and articles that provide an abundance of thought-provoking ideas, advice and educational guidance. The ARMY Magazine staff maintains a file of authors and articles, and it is their hope that digitization and categorization by subject will be available at some future date, when one might ask, for example,

By Gen. William C. Westmoreland
U.S. Army retired

WWII at 50

Former Chief of Staff Reflects

Riding to Battle

Gen. William C. Westmoreland recalls his experiences early in World War II.

As the year 1942 arrived, the echo of Pearl Harbor was clear—we were at war. At Fort Bragg, N.C., where I had arrived earlier that year, was buzzing with activity.

The 9th Infantry Division in which I was a new major—age 27—was in the front rank of readiness, having just completed maneuvers. Our ranks were filled with new draftees, most at least as my battalion from the New England states.

Our officers were products of ROTC from Midwestern colleges. With few exceptions, they were good men eager to play their role in the war ahead.

Our weapons were mainly holdovers from World War I. They were the M1903 Springfield rifle the .45-caliber pistol and the 1917 M1 howitzer pulled by a five-ton Mack truck.

The new 105-mm howitzer was yet to be received. We had the newly produced Jeep and a new 6-ton command car.

In the fall of 1942 we engaged in maneuvers over a six-week period in North and South Carolina. Regular and National Guard units participated. It was not a testing exercise, but it was worthwhile. There were shortcomings at every level of command.

During the exercise, I was S-3 and executive officer of a 155-mm howitzer battalion. The troops were eager to learn. It became evident to me that some of the older officers would not measure up to the challenge of combat.

I became interested in going to jump school with the prospect of joining a newly organized airborne division and put in my request for parachute training. My application came back disapproved. When I could get a few days leave, I drove to Washington to urge reconsideration of my request but to no avail. It was years later that I learned the reason for disapproval.

In 1941, the political direction of France was uncertain since there were senior French military officials considering joining the German alliance. The island of Martinique in the Caribbean Sea was a French colony and, if France became hostile, the 9th Infantry Division would react in force and seize the island. Hence, all field grade officers assigned to the division were frozen in place.

Nevertheless, the division threw off several sets of cadres to form new divisions. To ensure that these cadres were not used as a means of getting rid of marginal soldiers, each time the leaving unit was required to submit two cadres—A and B—and it was decided by higher headquarters which cadres would be transferred to the newly activated division.

After a year of a sustained level of readiness, the 9th Infantry Division was ready for combat with seasoned German units in Tunisia, the first of eight campaigns on the road to the Elbe.

April 1993 ■ ARMY 43

GEN William Westmoreland was a frequent contributor to ARMY.

for "everything written about field artillery." Today there are bound volumes of the yearly issues of the magazine dating back to the 1950s as well as issues of the *Combat Forces Journal* and the *Infantry Journal*, the precursors of ARMY. Selected articles from these publications are in volumes such as the *Infantry Journal Reader* and can be found in the informal library, but they require a visit to the magazine's home office to peruse.

For anyone pursuing the profession of arms, the information found in the back issues of ARMY could prove quite valuable. It is history that the great body of our profession would do well to be aware of and perhaps guided by. The old saw that those who do not know the lessons of history are doomed to repeat the mistakes of their forebears is still a relevant observation. One may not find advice comparable to "The Gettysburg Address" or "Washington's Farewell Address," but browsing through some of the more contemporary thoughts expressed in the magazine can be a valuable expenditure of a little time.

Two more thoughts concerning the impact of recent events on the future of Army education: First, the "sword of Damocles" has actually fallen on the Department of Defense budget, and congressional expressions of corrections to be made do not alleviate the need for changes in 2012 to prepare for the reductions to come. Those changes will cause disruptions and deny attention to Army problems that have been "kicked down the road" in the past decade. Already one hears of reducing manpower resources of the U.S. Army Training and Doctrine Command, thereby exacerbating an already stressed educational and training institution.

Finally, I am now in possession of the 2011–2012 edition of *How The Army Runs: A Senior Leader Reference Handbook*, an impressive tome still at the 600-page level of the 1999 edition, but with the type size reduced to allow for a 25 to 30 percent increase in verbiage. This must mean a notable increase in knowledge imparted, which I shall search for at my leisure, but it also serves as an example of how the Army has done more with less during the past few years. □

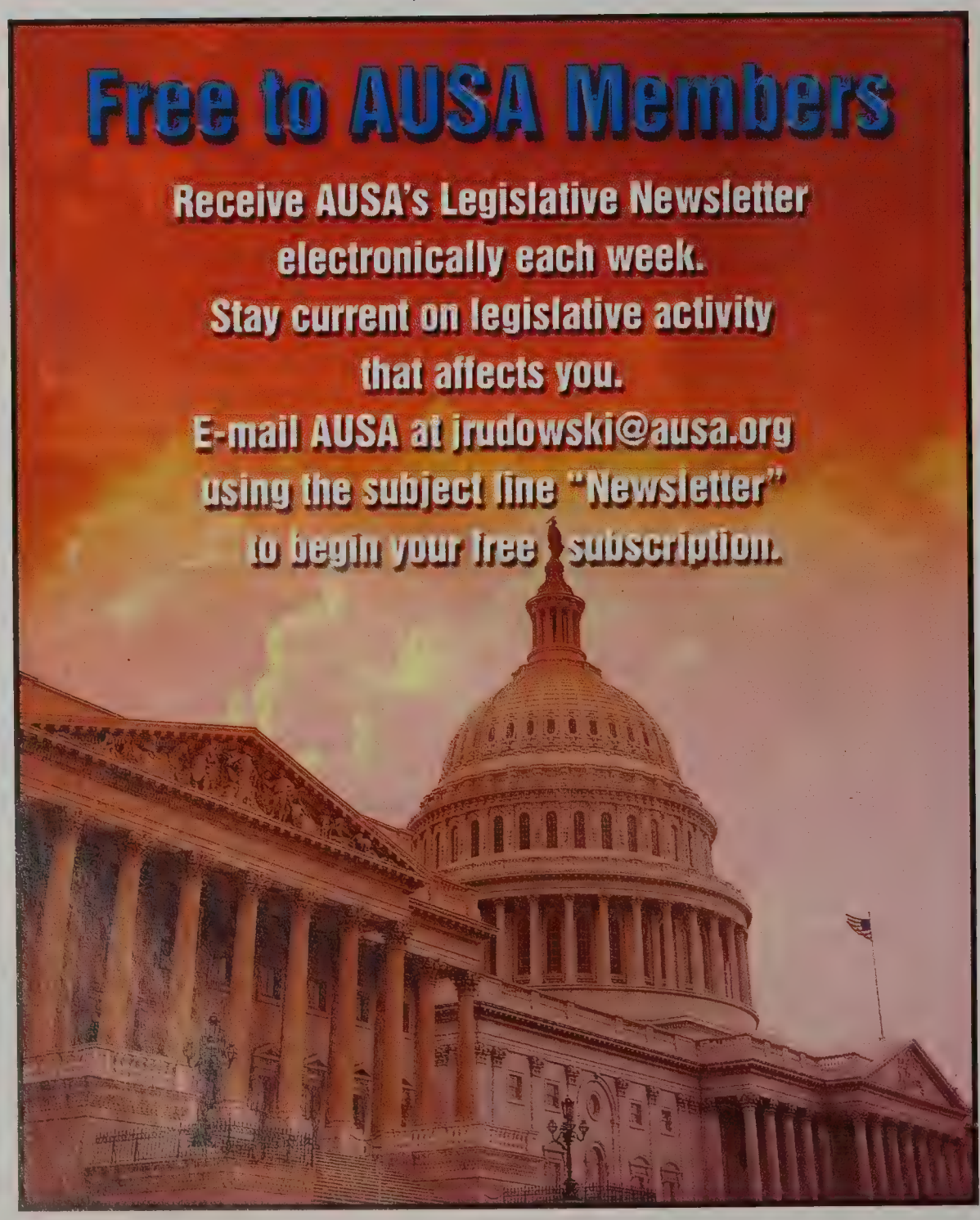
***GEN Frederick J. Kroesen**, USA Ret., formerly served as Vice Chief of Staff of the U.S. Army and commander in chief of U.S. Army Europe. He is a senior fellow of AUSA's Institute of Land Warfare.*

Asia-Pacific First: What Does this Actually Mean?

By LTG James M. Dubik
U.S. Army retired

During his trip to Australia, President Obama announced a "broader shift" in the security strategy of the United States. On the one hand, the announcement acknowledges the obvious: that "the United States has been, and always will be, a pacific nation." From this perspective, (a) the "larger and long-term role" the U.S. will play "in shaping this region and its future" is just the natural consequence of America's status as a pacific nation; and (b) the directive "to make [U.S.] presence and missions in the Asia Pacific a top priority" confirms what many of us who have served multiple tours in the Pacific have known for a long time. On the other hand, the announcement is troubling because at times the speech seems to cross over from *a* top priority to *the* top priority. The President said, for example, that cuts "in U.S. defense spending will not—I repeat, will not—come at the expense of the Asia Pacific. … We will allocate the resources necessary to maintain our strong military presence in this region. We will preserve our unique ability to project power and deter threats to peace. We will keep our commitments. … "

Is a shift of this magnitude warranted? A brief review of the current strategic landscape suggests it is not. Is making Asia-Pacific the top priority consistent with other U.S. national security interests that seem more important? With respect to ensuring that the United States retains the appropriate set of military capabilities necessary for the future, is a shift to "Asia-Pacific first" wise? The short answer is "no."



Current Strategic Landscape

Even though the President said in his speech in Australia that today's wars are ending, and although all Americans—especially those who have fought in these wars—want them to be over, they are not.

The United States left Iraq, not because the war is over, not because the mission was accomplished, but because our legal mandate expired and we were unable to negotiate a satisfactory replacement. The administration has acknowledged the many important successes in Iraq, and all who helped make them a reality should be proud of them. All must also acknowledge, however, that some U.S. security objectives were not achieved: Iraq is not a nation that can defend itself, remains a nation in which terrorist organizations can and do exist, and is not a nation that is contributing to stability in the region. The issue is not whether the United States should shift our Iraq strategy to one in which diplomatic engagement is primary. We should. The issue is that achieving objectives directly related to America's own security required a military-to-military relationship with Iraq, and the United States failed to secure such a relationship. We left with our interests unsecured.

Neither is the war winding down in Afghanistan, even if the planning for U.S. withdrawal has begun. The International Security Assistance Force (ISAF) has pushed the Taliban out of their former strongholds in Helmand and Kandahar provinces, and they have taken the fight to the east, where both the Taliban and the Haqqani network operate. The NATO Training Mission Afghanistan has improved the

Afghan security forces such that they are large enough and capable enough to assume more responsibilities in Helmand and Kandahar as well as in other provinces where the levels of violence are low. In these areas, ISAF can direct a "change of mission." To reduce the Taliban and Haqqani network in the east, however, requires two more fighting seasons (2012 and 2013). No change of mission should occur in these areas.

The current withdrawal plans put success in Afghanistan at risk—so much so, in fact, that Stephen Biddle of the Council on Foreign Relations has written, "The range of achievable outcomes in Afghanistan is narrowing as Western effort wanes. The ambitious goals of the Bush administration were probably never attainable. … But even minimally democratic accountability may soon be beyond reach. If so, some form of delimited warlord rule will be the outer bound of the achievable. … Even this option [however] could slip away if some critical reforms are not instituted soon." In a very real sense, the United States seems to be planning a withdrawal independent of many of the facts on the ground.

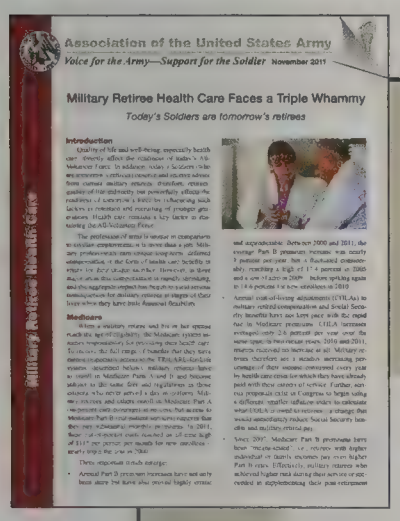
Finally, to underscore the fact that the United States has been in three interrelated wars—not two as some believe—our fight against al Qaeda and its affiliates is not over. Al Qaeda's capability has been significantly reduced since 2001. It is not an existential threat to the United States, but it has affected our economy, perverted our spending, changed the way we live as a political community and eroded our sense of security. The death of Osama bin Laden was a huge blow, and al Qaeda is disrupted in some areas, but the stated American strategic objectives of dismantling and defeating it have not been met.

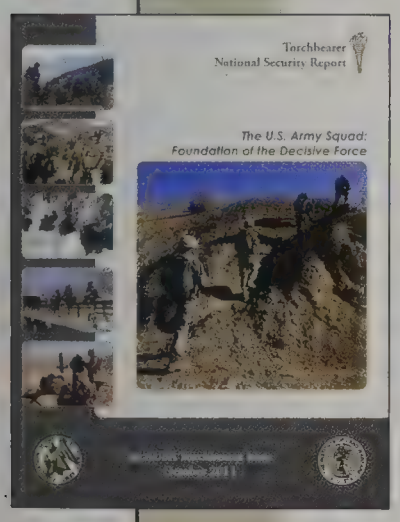
All things considered, perhaps current U.S. policy in Iraq and Afghanistan is correct. Our economic health is one of the most important foundations of our nation's security, and we must attend to this health. There is a limit to what can be achieved by force of arms or by diplomacy, and maybe we have reached that limit. Reasonable people can disagree on these subjects. What is beyond debate, however, is this: If one of the reasons the United States believes it can shift its strategic security focus to the Asia-Pacific region is because the wars in Iraq and Afghanistan and against al Qaeda are over, then the nation is making this shift in a state of delusion. America's security strategy should be based upon a clear-eyed acknowledgement and understanding of reality. The fact is that the wars are not over; the greater Middle East and Central Asia regions remain a challenge to American security interests.

Other U.S. National Security Interests

The Asia-Pacific region as *a* top priority makes sense; as *the* top priority it does not because it is inconsistent with other important and enduring priorities listed in the current National Security Strategy and the Quadrennial Defense Review (QDR).

The security section of the National





Help AUSA continue to be the Voice for America's Army

The Institute of Land Warfare (ILW), the educational arm of AUSA, publishes papers and Torchbearers that educate the Administration, Congress and the general public on issues directly affecting America's Army and our Soldiers.

The printing of these papers costs money and ILW, as a non-profit, must depend on contributions. Help ILW continue to ensure that America has the strongest Army possible and that our Soldiers are taken care of.

For more information, please contact Millie Hurlbut at 703-907-2679 or mhurlbut@ausa.org.

THE INSTITUTE OF LAND WARFARE • AUSA •

Security Strategy outlines six objectives: strengthen security and resilience at home; disrupt, dismantle, and defeat al Qaeda and its violent extremist affiliates in Afghanistan, Pakistan and around the world; reverse the spread of nuclear and biological weapons and secure nuclear materials; advance peace, security and opportunity in the greater Middle East; invest in the capacity of strong and capable partners; and secure cyberspace. The International Order section describes four: Ensure strong alliances; build cooperation with other 21st-century centers of influence; strengthen institutions and mechanisms for cooperation; and sustain broad cooperation on key global challenges.

The last Quadrennial Defense Review explicitly links force planning, which determines the overall size and capabilities of U.S. armed forces, to four priority objectives: Prevail in today's wars, prevent and deter conflict, prepare to defeat adversaries and succeed in a wide range of contingencies, and preserve and enhance the all-volunteer force. Then the QDR goes on to direct significant enhancement in six areas: defending the United States and supporting civil authorities; succeeding in counterinsurgency, stability and counterterrorism operations; building the security capacity of partner states; deterring and defeating aggression in anti-access environments; preventing proliferation and countering weapons of mass destruction; and operating effectively in cyberspace.

Undoubtedly, the Asia-Pacific region figures prominently in many of the objectives previously cited. How one derives an Asia-Pacific-first approach from these objectives, however, is unclear. Rather, one seems to be on stronger ground with a claim that the greater Middle East region would demand America's highest international attention, with the Asia-Pacific region an important but secondary area. Also unclear is how, given the stated priorities and enhancements in the QDR, at least some U.S. defense spending will not come at the expense of goals in the Asia-Pacific.

"Your job, Murphy, is to defend against North Korean Missiles."

U.S. Military Capabilities

Using the Asia-Pacific to determine the size of U.S. armed forces and the capabilities that should reside in those forces would result in the wrong military for the future we face.

Uncertainty is the central reality of the current and foreseeable strategic horizon, as it has been since the end of the Cold War. To date, the way the United States has sought to deal with this uncertainty has been to select a scenario or set of scenarios from which military force structure and capabilities are derived—for example, the Base Force, two major wars, two major regional contingencies, or hold in one theater/win in another—the underlying assumption being that if America can deal with the adopted scenario, it will have what it needs for other unforeseen contingencies. In effect, the adopted scenarios create a false sense of certainty, which is easier for a bureaucracy to deal with.

A recent Center for a New American Security study, "Driving In The Dark: Ten Propositions About Prediction and National Security," by Richard Danzig, shows why this approach fails to deal with the central reigning issue facing America's civil-military defense bureaucracy: uncertainty. In sum, Danzig demonstrates that the propensity for prediction—one manifestation of general case that "managers seek to simplify problems in order to render them more predictable"—is especially deeply embedded in the U.S. Department of Defense. Danzig goes on to say, "Conceding uncertainty would weaken budgetary claims, power and status." No bureaucratic interest, he concludes, "is served by emphasizing uncertainty." The current U.S. National Security Strategy con-

There's never been a better time to join Navy Federal!

For over 75 years, we've been providing quality products and services for our members—not because it's the popular thing to do, but because it's the right thing to do.

- Low auto loan rates
- 24/7 live telephone support
- Nationally recognized credit cards
- Free Active Duty Checking®* with no monthly service fees and up to $20 in ATM fee rebates**
- 45,000 free ATMs in our CO-OP and MoneyPass® networks—in addition to others
- Free mobile banking
- Free Web Bill Pay

ARMY
MARINE CORPS
NAVY
AIR FORCE
DoD

NAVY FEDERAL®
Credit Union
navyfederal.org
1.888.842.6328

Visit one of our over 200 branches worldwide.

Federally insured by NCUA. *To qualify for this account, member must be active duty, retired, or reserve military and must sign up for an Active Duty Checking account with Direct Deposit ($500 minimum) within 90 days of account opening. **$20 ATM fee rebates only available with Active Duty Checking. Rebates available at ATMs in the Visa/PLUS® System Network. © 2011 Navy Federal NFCU 11076 (11-11)

firms Danzig's point. While positing a "broad and complex array of challenges to our national security," in neither section addressing "the world as it is" does the document describe uncertainty or ambiguity as the essential characteristic of the security environment.

"The experience of the Department of Defense and social science literature demonstrate that long-term predictions are consistently mistaken," Danzig explains, yet some efforts have to be made in forecasting possible futures. In this light, an important question emerges: Is the Asia-Pacific-first strategy actually intended to be another scenario-based, military-force-sizing mechanism that avoids facing the facts, as Danzig presents? Such an approach would be consistent with previous post-Cold War models, and it would have the same result: not producing the mix of military capabilities our nation needs.

Is deriving a force structure and capability set from uncertainty and ambiguity just too hard for our bureaucracy to do? One can explain the Base Force, for it emerged almost simultaneously with the collapse of the Soviet Union and the bipolar Cold War strategic environment, and America's civil-military bureaucracy did not have the time to understand and adapt to that new environment. The shift to the Asia-Pacific, however, comes more than 15 years later. For nearly two decades, the strategic environment has called for innovation and adaptation, but the U.S. response has been more bureaucratic "business as usual" than thoughtful—even if iterative—change.

In the end, what does the announced "broader shift" in the security strategy of the United States actually mean? Is it a statement of the obvious that will result in no major changes with respect to America's security strategy, spending or force structure? Or is it a huge departure from our past, one that lacks adequate grounding in the full set of American security interests and the realities of current or future security environment? We are left wondering. □

__LTG James M. Dubik__, USA Ret., is a former commander of Multi-National Security Transition Command-Iraq and a senior fellow of AUSA's Institute of Land Warfare.

Maybe It's Time to Channel George F. Kennan

By Richard Hart Sinnreich

Since November, folks interested in U.S. foreign and defense policy have been inundated with a spate of reviews praising a book by Yale University's John Lewis Gaddis, widely regarded as the dean of American Cold War historians.

Entitled *George F. Kennan: An American Life*, Gaddis's book is a critical biography of the diplomat-historian who authored the Containment strategy that formally underwrote U.S. foreign policy throughout the Cold War, although it was executed in a fashion to which its author objected for the rest of his life.

That Kennan once again should become a focus of discussion and debate among foreign policy literati is ironic but perhaps not surprising, after a decade of continuous and costly military intervention that has contributed to resentment abroad and both political controversy and a massive fiscal deficit at home.

Kennan foresaw the likelihood of both unhappy developments long before "the global war on terror" and "persistent conflict" became the latest rhetorical justifications for the continued militarization of U.S foreign policy. Indeed, that militarization process began nearly before the ink was dry on Containment.

Although envisioned by Kennan largely as a diplomatic and economic strategy, with the Marshall Plan perhaps its supreme expression, Containment soon found itself hijacked, in the unabashed—indeed, self-congratulating—claim of Paul Nitze, one of the principal hijackers, by those who saw military force as the preeminent tool of deterrence and defense, and American intervention as the essential preventative against communist expansion through insurgency.

The resulting enlargement of military ambitions was checked only briefly by President Dwight D. Eisenhower, who, in his farewell address, warned famously of the dangers to American liberty associated with an unrestrained "military-industrial complex," and less famously, but no less perceptively, of the danger to American prosperity of the "impulse to live only for today, plundering, for our own ease and convenience, the precious resources of tomorrow."

Above all, in a sentence that Kennan might have written but that unhappily proved to be anything but prescient about subsequent U.S. foreign policy, Ike argued, "We must learn how to compose differences, not with arms, but with intellect and decent purpose."

Instead, only a few days later, his successor proclaimed what one journalist later characterized as "a summons to war and engagement and intervention on a global scale." The ideological self-righteousness embodied in that summons would write the death warrant of tens of thousands of young Americans.

Today, that same self-righteous immoderation continues to kill still more U.S. soldiers. Indeed, not content with a decade of war in Iraq and Afghanistan, countries in which America's vital interests were and still are at best ambiguous and at worst nonexistent, some now urge war against Iran or intervention in Syria, Yemen and elsewhere, while others warn of an "inevitable" clash between the U.S. and China, despite our mutual economic interdependence.

None of this would surprise Kennan, who, at age 98 in his last public interview a few months before the U.S. invaded Iraq, warned that "War has a momentum of its own, and it

carries you away from all thoughtful intentions when you get into it."

He was right, of course, as he had been right to oppose the deformation of Containment resulting in the Vietnam War, right to object to the equally feckless if fortunately less expensive invasion of Iraq, and right to score what he correctly perceived as a foreign policy compounding shortsightedness with arrogance.

As the last American soldiers exited Iraq, leaving behind a country ravaged by war and facing an uncertain future, as still other American military personnel prepare to begin withdrawing from an Afghanistan whose future evolution is even less predictable, and as Americans here at home seek to cope with the human and fiscal tolls to which both wars have contributed, it may be time to revisit George Kennan, not just as a historical figure, no less flawed than any other such figure, but rather as the uniquely farsighted prophet that he has proved repeatedly to be.

In a recent article in *Smithsonian* magazine, former *New York Times* editor Joseph Lelyveld writes, "As we enter the second decade of this struggle, we have gotten out of the habit of calling it a global war. But it goes on, not limited to Afghanistan and Iraq. How will we know when it's over—when we can pass through airport security with our shoes on, when closing Guantanamo is not unthinkable, when the extraordinary security measures embodied in the renewed Patriot Act might be allowed to lapse?"

Writing to his nephew on the eve of the invasion of Iraq, Kennan mourned that "What is being done to our country today is surely something from which we will never be able to restore the sort of a country you and I have known." If the answer to Lelyveld's question turns out to be "never," George Kennan sadly will have been proved prophetic once again. □

Richard Hart Sinnreich *writes about military affairs for* The Lawton (Okla.) Sunday Constitution. *This article originally appeared in the December 11* Lawton Constitution *and is reprinted by permission of the author.*

The Strategic Importance of U.S. Forces in Europe

By LTC Chris Budihas

Because of a prolonged recession, the United States is currently grappling with a depressed economy, resulting in high levels of unemployment and an American population that questions where the nation's leadership is taking it. This domestic tension is set against an international backdrop of revolutionary movements across North Africa and the Middle East, a European Union that continues to bail out small member states like Greece and Portugal that mismanaged their economies, and a series of foreign natural disasters requiring international assistance, such as the massive earthquake causing the Fukushima nuclear power plant meltdown.

With all this rising domestic tension and global instability, U.S. governmental and senior military leadership is left to question: How much U.S. military force should we leave in Europe? This is a totally relevant question, which should not be answered in haste. A more important question is: How much U.S. military force can we *not* afford to leave in Europe? As they seriously debate budget cuts and deficit reduction, the nation's senior governmental and military leaders must realize the strategic importance of a forward presence of U.S. forces in Europe—forces that preclude conflict, build interoperable capabilities between allies that influence current and future joint multinational operations, and, most importantly, strengthen political-military (pol-mil) relationships that influence coalition building in anticipation of future contingencies.

The importance of U.S. forces in Europe can be easily misunderstood by both the average American citizen and historically ill-informed political leaders, as many may believe the need to keep U.S. forces forward-deployed is an antiquated Cold War legacy. Some members of Congress believe that, economically, it's time to bring the troops home. While on the surface this appears to be a logical decision, it's extremely shortsighted. Yes, bringing an Army brigade back to Fort Hood, Texas, or a Navy ship to Norfolk, Va., will inherently funnel U.S. tax dollars back into local economies, but at what strategic cost? The immeasurable void

these repositioned forces would leave in U.S. worldwide security should not be dismissed. These forces, which regularly deploy throughout the world to partner with many nations, may seem expensive on the surface. In reality, however, maintaining our presence is cheaper than either the cost of not having their pol-mil support when global crises arise in the future or worse, operating against them if we lose the current mutual cooperation we have now.

A second critical reason for U.S. forces' continued presence in Europe is that regular theater security cooperation activities and multinational exercises serve as a training medium to collectively determine our militaries' shortfalls and complementary capabilities. This is very important, as U.S. governmental leaders have realized through our current wars. Building coalitions in the prosecution of warfare is important from many angles, specifically for gaining and maintaining international legitimacy and support throughout the execution of the conflict itself. As we saw in the early years of the wars in Afghanistan and Iraq, the disparities in our equipment's capabilities and/or doctrines can cause a number of unforeseen operational difficulties and, in some cases, unintended lethal consequences.

Through current theater security cooperation engagements, the United States greatly assists its allies in gaining greater military competency and increases collective understanding. Our historical core of European allies has grown since 1989, as the U.S. military built ties with many former Eastern Bloc countries. These ties are not necessarily unilateral in nature, as was observed in a recent multinational exercise in October 2011 in Grafenwoehr and Hohenfels, Germany, where 17 countries, many with no hostile military history, collectively conducted a successful month-long joint training operation. Such exercises build a comprehensive military capacity that brings real value when addressing global conflicts. Many of the nations that participated in the October maneuvers have also participated in the wars in Afghanistan and Iraq, are participating in peace support operations in the Balkans, and took part in the successful NATO operations in support of the Transnational Council government in Libya.

Multinational training not only increases interoperability and mutually supportive capacities but, more importantly, strategically molds and bonds global pol-mil relations to strengthen U.S. foreign relations. In a recent visit to the U.S. Joint Multinational Training Command at Grafenwoehr, the U.S. Army's 32nd Chief of Staff and Association of the United States Army President GEN Gordon R. Sullivan noted that our Army's partnerships with European-based militaries have facilitated U.N. and NATO members' willingness to participate in peacekeeping operations elsewhere. If the U.S. did not have such strong pol-mil relationships, then there would not be enough soldiers for the current mission in Afghanistan, forcing the United States either to fill those numbers with U.S. soldiers or, more dangerously, to go without them. Where would we have found nearly 30,000 U.S. soldiers if we did not have reliable European and NATO partners to fight with us in Afghanistan over the last 10 years, considering that much of our U.S. military has been in Iraq since 2003?

Drastically reducing our U.S. military presence in Europe will have second-order effects in future pol-mil relations and will negatively influence coalition building in the wake of future conflict. Our military has been an influential international leader, especially in Europe, since the Iron Curtain fell in 1989. Many nations shape their military force structure in some manner like the U.S. military, an internationally respected model of a professional military.

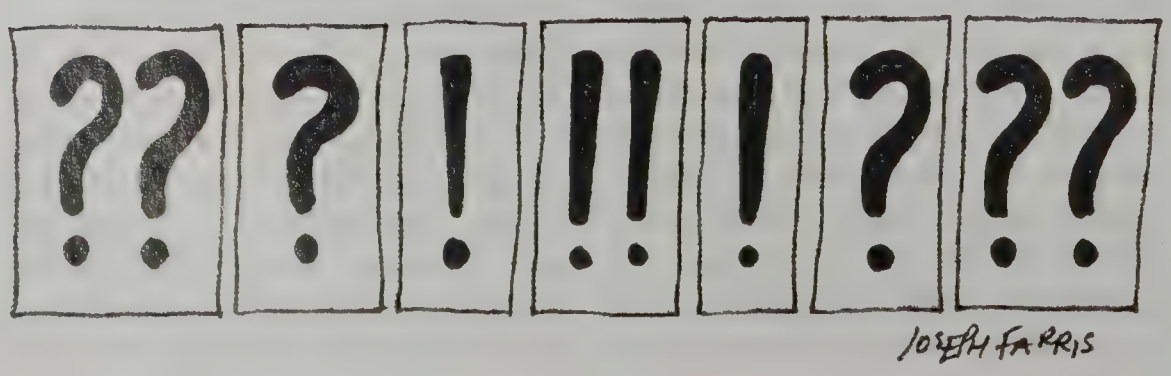
The fiscal investment the United States has in keeping its current nominal number of forces in Europe is well worth the cost. Our nation cannot afford to stop building on our existing international partnerships that will prepare us as a collective international force to take on whatever future conflicts may arise.

The governmental leadership's geopolitical problem is complex, much of it underlined by its struggling economy and a need for an enduring articulated foreign policy that guarantees security of its international efforts.

This present dilemma, however, cannot cause them to underestimate both the tangible and intangible importance of U.S. military forces being stationed in Europe as they determine where to cut the deficit that will inversely affect the Department of Defense budget. A U.S. force presence is not an archaic Cold War strategy but an important mechanism of strategic influence that precludes conflict, builds interoperability among militaries and enhances pol-mil relations that will influence future coalitions at the onset of conflict. □

LTC Chris Budihas *is a career military officer with more than 24 years of officer and enlisted infantry experience, including operational deployments throughout Europe and Southwest and Southeast Asia. He holds a bachelor's degree in political science and master's degrees in business management and military arts and science.*

This article is the opinion of the author.



What's 'Back to Basics'?

By COL Chad B. McRee

You hear it everywhere: "We are going back to basics." While I believe that leaders understand it, I am not sure the actual context of the statement resonates with our junior leaders. GEN Martin E. Dempsey began the trend with a thoughtful piece on the profession of arms. Certainly getting back to the basics is as simple as artillerymen shooting preparatory fire and infantrymen thrusting bayonets on the bayonet course, but getting back to basics is even more rudimentary than that. It really *is* about getting back to the basics.

Recently our brigade conducted an officer professional development session entitled "Professional Standards," and it was led by one of our executive officers of the brigade, MAJ Will McKannay of the 91st Military Police Battalion at Fort Drum, N.Y. It was a superb event; in fact, the feedback on how we conduct these sessions has been encouraging.

In addition, the thirst of our young officers to return to the Army known as a profession was positive.

For this brigade I cannot walk out the front of my headquarters and see all four battalions. To see them I must travel to Fort Drum; Fort Campbell, Ky.; or Fort Stewart, Ga., in addition to our one resident battalion at Fort Bragg, N.C.

Under Training Readiness Authority (TRA), we have our own challenges for oversight, but through the use of holistic training sessions, video teleconferences, phone bridges and travel, we have created an exceptional opportunity for our separate battalions that was absent before the establishment of TRA. Now our officers and NCOs share experiences across the brigade just like those geographically stationed together. Our units find out what works at Forts Bragg, Drum, Stewart and Campbell. They exchange ideas and symptoms, and so much of the exchange involves basic concepts of working as a team, only now it is done through advanced technological means.

TRA has allowed a very deliberate exchange within our Family Readiness Groups (FRG) and an opportunity for us to demonstrate the importance of what ready and prepared families can do for the overall readiness of a unit. Through TRA we were able to bring our leaders together (both soldier and FRG leaders) at our brigade-hosted leadership symposium and discuss topics that ranged from field training to inspections, the importance of a barracks "walk-through" to the roles and responsibilities of the charge of quarters. We discussed the roles of the officer and the NCO as well as the critical role our families play in the overall betterment of our organizations. These exchanges, which happen only under TRA, provide us an important opportunity to merge different organizational and installation cultures into one body while at the same time establishing one brigade standard that is consistent throughout the organization even though it is geographically dispersed.

When I was a lieutenant in the Berlin Brigade, I read a book by MG Aubrey S. (Red) Newman, USA retired, entitled, *Follow Me: The Human Element in Leadership.* I realized then that drill and ceremonies were not about the infamous Fourth of July parade with the Allies on the Fourth of July Platz, but about honing a unit into a disciplined, homogeneous one. I took the lesson from that book and applied it to my platoon when we were having difficulties, and, sure enough, over the course of a couple of weeks the platoon once again began to jell. This concept is something I have shared as a company, battalion and now brigade commander. It works!

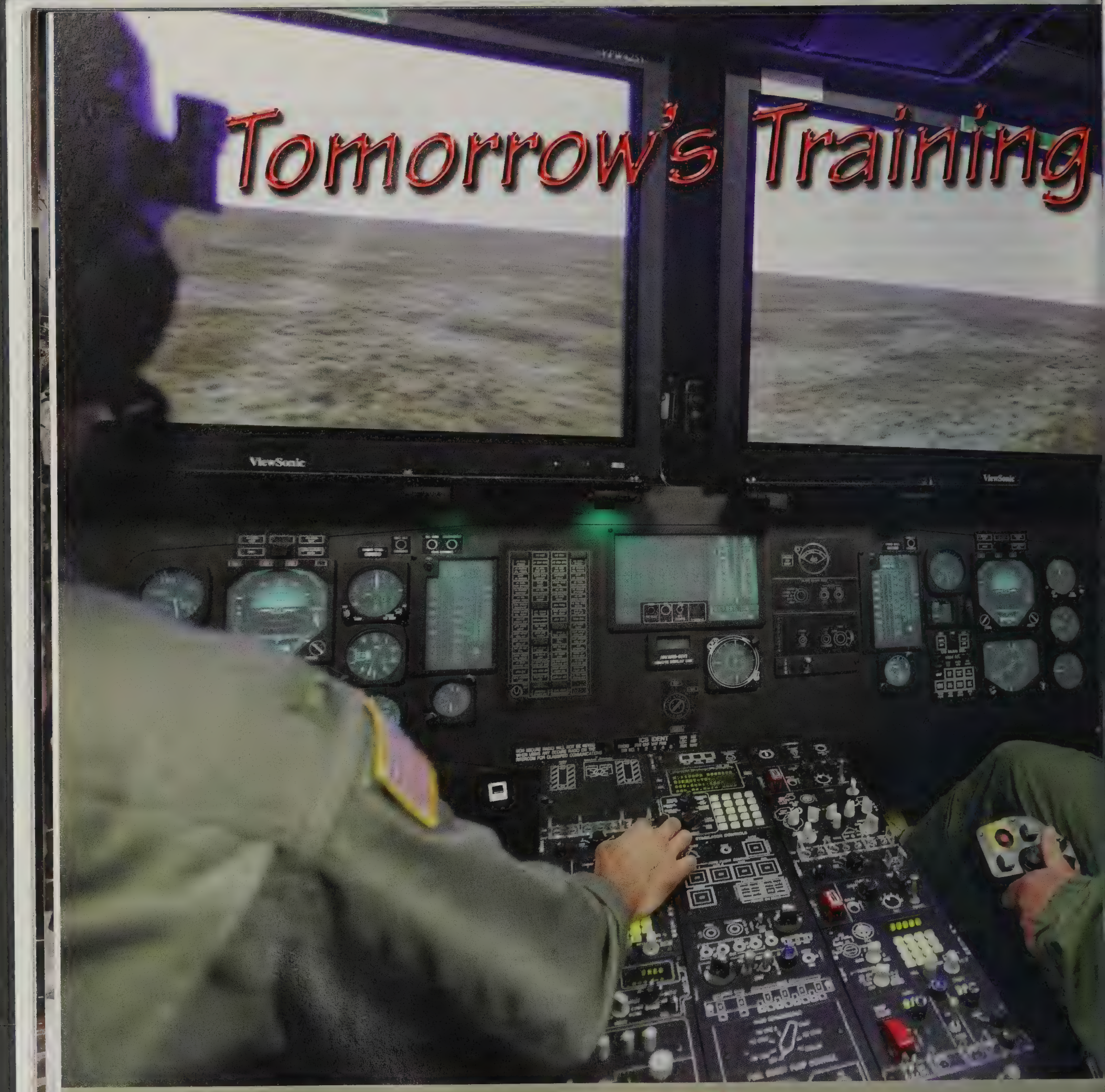
As a brigade commander, I have observed thousands of dollars in equipment and individual gear lost in combat and written off to Financial Liability Investigation of Property Loss. Some equipment was not discovered missing until the soldier prepared to depart the organization several years after the events that caused the losses. As I peeled the issues back, I discovered something revealing: Inspections of individual equipment were not being done, leaders were not checking and following up, and soldiers were not properly maintaining clothing records. I directed that clothing records be reestablished in each company supply room and that all soldiers re-sign that clothing record quarterly under the watchful eye of their sergeant—not a new concept, but a basic concept that I am certain will result in better visibility and accountability of property. It has been said, "Never ask anything of your people that you are unwilling or incapable of doing yourself." For me, this epitomizes the notion of leading from the front and setting the example. This is a basic leadership principle.

Back to basics is about a whole lot of things. It is about teaching and training in basic branch core requirements; walking in rounds by artillerymen; establishing expertise of military police law enforcement on our installations; an infantry squad fighting through the objective; soldiers knowing how to read a map and how to use a compass; and knowing how to conduct proper preventive maintenance checks and services at the operator level. It is about leaders inspecting, questioning, counseling and providing constructive, critical feedback. It is about never settling for the status quo but always improving on the fighting position. It is about drill and ceremony, supply accountability, and knowing your job so you never ask something of your people that you are unwilling or incapable of doing yourself.

In the end, to be good soldiers we need to understand the basics that make good soldiers great. To understand the basics we all need to know our jobs. It is about basic good order and discipline in all we do. It is about maintaining our warrior ethos, good stewardship with budgets and resources, and ingenuity to motivate, discipline, coach and build our people into a team in order to accomplish the mission. □

COL Chad B. McRee *is the commander of the 16th Military Police Brigade and director of emergency services at Fort Bragg, N.C. He is a former enlisted soldier with more than 30 years of military service and has served multiple tours of duty in the continental United States and abroad.*

Tomorrow's Training



An aircrew from the Louisiana Army National Guard uses the Aviation Combined Arms Tactical Trainer (AVCATT) during training at Fort Sill, Okla. The AVCATT allows aircrews to perform many training tasks that would otherwise be costly, saving more than $3,000 per blade hour.

One of the first arenas in which U.S. Army warfighters experience the impact of "tomorrow's technologies" involves training and simulation. Dr. James T. Blake, U.S. Army Program Executive Officer for Simulation, Training and Instrumentation (PEO STRI) recently discussed how a representative example of warfighters will soon benefit from tomorrow's technologies through the Army's new Dismounted Soldier Training System (DSTS), slated for initial fielding in 2012.

"Senior service leadership is focused on taking care of

Technologies—Today

By Scott R. Gourley

U.S. Army/Hiro Chang

the squad," Blake explained. "In the past we have always had simulators for tanks or aircraft, but we really haven't had a good immersive simulator for the individual soldier in a squad."

Identifying the squad level as "the only place where we lack strategic overmatch," he noted that technology efforts had been directed toward that gap, with the initial result being DSTS.

"It's an exciting capability," Blake said. "Essentially you can bring nine folks into a room anywhere, give them helmet-mounted displays and place them in an immersive environment. After entering the room, each person stands on a 10-foot by 10-foot square. They can interact with each other. Each sees 360 degrees and hears 360 degrees of surround sound. It's an incredible capability. They can see the other members of their squad. Those squad members can see them. They can focus on taking care of an adversary. They can practice proper procedures for 'stacking.' And that's current state-of-the-art technology in addressing what we know as the number-one gap."

The prototype system will soon be delivered to Fort Benning, Ga.

"What's so exciting about that is that Fort Benning is not only the combat developer but … also the infantry folks," Blake said. "They will run it through its paces. We are hoping that we will learn a lot about any gaps that might exist so that we can refine those before we do the final fieldings."

Another pending fielding of new training technologies highlighted by Blake as "cutting edge" and "visionary" involves the holistic training approach called blended training environments. Under this concept, PEO STRI is responsible for providing commanders with a "tool kit" to integrate four different facets of training: live, virtual, constructive and gaming.

"Comments are often made that nothing replaces live training," Blake said, "and in some domains and in some specific tasks that is a true statement, but when you think about how you try to simulate a squad, for instance, the fact is that all of the operational equipment and enablers they would have in combat can't be done in live training in the United States. For example, we don't have UAVs that can fly and support them. We have to do that in simulation. So you need a blended training environment to really achieve your training objectives. You need the physical squad training, but you also need the things that would assist the squad: things like the command structure and ISR assets, and you can only do that in the United States with a blend of training environments.

"We will field the capability on a scale capable of

SPC Martin Bourque of the Louisiana Army National Guard engages simulated enemy targets in the AVCATT gunner simulator. The AVCATT can be changed to simulate any Army helicopter type in 30 minutes.

U.S. Army/Hiro Chang

training a brigade combat team," Blake explained. "We will be able to have a battalion 'in the box,' using IMILES [Instrumentable Multiple Integrated Laser Engagement System] and HITS [Homestation Instrumentation Training System] for their training. Then we could also have virtual simulation going on with CCTT [Close Combat Tactical Trainer] and AVCATT [Aviation Combined Arms Tactical Trainer], so that battalion that's 'live' can get virtual aircraft, Abrams and Bradley support into their training. Then we wrap that with OneSAF [One Semi-automated Forces], so that we have a constructive wrap where we can put a battalion or brigade command post out there to simulate that entire environment."

The first instance of the Army's blended training environment tool kit will be delivered during fiscal year (FY) 2012 to Fort Hood, where, Blake said, it will be used to identify possible improvements "so that this immersive experience that we're going to provide to the other posts, camps and stations is all that it can be and we have the latest hardware when we field it."

"We have matured the technologies enough that we can do these 'persistent wraps' at low overhead. Earlier it might have taken months, if not years, to put together a simple exercise. Today the goal we have is to do these exercises and, after each one is designed, put it up on a shelf so others can reuse it. So the time from getting a task to build an environment to executing that environment on the ground gets smaller and smaller with fewer and fewer of what I call 'tie guys,' or folks who are associated with having to operate the equipment. And this year, FY 2012, is the year we are going to deliver it."

While not considered "visionary" by most, another example of a new training technology that has recently started supporting warfighters is the Digital Range Training System (DRTS).

Noting the recent installation of the "live domain" system at Rodriguez Live Fire Complex in the Republic of Korea, Blake said, "They had a multipurpose range out there that was really a legacy system—an old analog system, and MG Michael Tucker, former commander, Second Infantry Division, asked us to come out and see if we could accelerate the fielding of a newer technology range there. As a result, they now have a digital multipurpose range complex and a digital multipurpose training range that is state-of-the-art. It's world-class, and it is on the leading edge for all of the Army.

"One thing that makes it leading edge is that the range and that system are now designed to allow for offensive maneuver," he said. "In the past there were battle positions on the range. A tank would pull into the battle position, fire, back out, get back on the trail, and then go farther down and do it again. In the new battle positions we put there, they can now roll up on a mound, fire and then con-

---

Scott R. Gourley, a freelance writer, is a contributing editor to ARMY.

Next-Generation Training Technology

At the same time that representatives from Program Executive Office for Simulation, Training and Instrumentation are implementing state-of-the-art training technologies, representatives from U.S. Army Research, Development and Engineering Command (RDECOM) are looking out to the next generation of technologies that could be applied in a military training environment.

An example of one of these RDECOM technologies is the Generalized Intelligent Framework for Tutoring (GIFT), an open-source, modular architecture for authoring, assessing and validating tutoring technologies.

"Adaptive tutoring is what GIFT is all about," explained Dr. Robert Sottilare, Associate Director for Science and Technology in RDECOM's Human Research and Engineering Directorate. "We want to manage the pace, flow, feedback and content of the instruction, and we want to adapt it to the learning needs of the trainee. Those needs include what they need to learn, how quickly they need to learn it, any type of refresher training that might be required, and so forth.

"It's based on their capabilities, so it is tailored to them," he said. "It might be based on their traits or personality—how they prefer to do things—and their cognitive and affective states.

"A lot of folks talk about the need to reproduce what is in the operational environment," he observed, "and what we want to do is balance that. A human tutor will do that by looking at your expressions and mannerisms. Those kinds of things are very obvious to a human but not very obvious to a computer.

"The whole thing behind GIFT is to streamline that process so that training developers who are with soldiers can develop training without having to have computer science guys or instructional system design guys because all of those capabilities will be built into the GIFT framework."

Acknowledging that GIFT is still in early development, Dr. Sottilare pointed to significant interest from collaborative developers in government, academia and industry.

tinue down on the serpentine trail. They can actually assault four-across. That's extremely exciting, and it is more like how we need to train to fight.

"MG Tucker was so excited about it that as soon as we finished testing, the next day a unit went out and live-fired," he added, "and within the first week they had a whole company firing at the live-fire complex. That's pretty incredible technology."

Elaborating on the digital technology, Blake said, "In the old days, if you were going to be an observer for a tank, you got up on the bustle rack and you looked down to see what the crew was doing, but today we have Thru-Sight Video. We know exactly what every crew member is doing. So we can build an AAR [after action review], and we can stop the exercise if something is unsafe. Now, by sitting back in a range control station you can see what every one of those tank commanders sees and what every one of those gunners sees, and if training has to occur, you can conduct that training immediately."

In parallel with the fielding of state-of-the-art training technologies across the Army, PEO STRI activities are also supporting ongoing service modernization through programs like the semi-annual Network Integration Evaluation (NIE) events at Fort Bliss, Texas, and White Sands Missile Range, N.M.

"From the NIE point of view you have to have a 'Red Force,'" Blake explained, "and through our PM ITTS [Project Manager, Instrumentation, Targets and Threat Simulators] we help provide that force. So when the NIE unit goes out to the field at White Sands, the threat environment that is portrayed out there is done through that office. We are very active in supporting the NIE process.

"We provide that capability to ATEC [Army Test and Evaluation Command], and we provide the material solution that enables ATEC to do the evaluation for the unit and for the systems under test," he added.

Asked about promising technologies on the horizon that might be applied across a range of training systems, Blake pointed to "miniaturization and driving down the cost associated with systems becoming the biggest payoff."

In terms of future projections, he said, "As we move to units coming back home from theater, and as we move to more home station training, we are going to have to work very hard to make sure that those folks who are back get the same kind of stimulus that they got when they were downrange. If the vehicle they used downrange is the latest Abrams tank, then our simulators have to replicate that when they come back, and if they are getting lots of sensor support when they are downrange, then they need to come back and have those sensors in their training environment. We have to challenge those young soldiers when they come back. They can't come back to a place where they will get less immersion than they had when they were engaged downrange. So we are working very hard to provide that type of solution set and to do what will require concurrency of all the technical enablers that we have."

Dr. Blake concluded by highlighting the last 25 years of technological advances that have set the groundwork for today's cutting-edge training capabilities. "It has come a long way," he said. "You can qualify in an aircraft without ever getting in that aircraft, through simulation. You can do your gated training before you go out and live-fire on a range, preserving precious ammunition. We have that simulation capability today. So, as we lose operational tempo, we can still sustain the skills we need, and in my view, as time goes on, I think we will have more reliance on simulation to maintain our edge." ★

U.S. Army Europe: For the Northern

U.S. Army Europe (USAREUR) has always been a great assignment, allowing soldiers and civilians to contribute to U.S. national security objectives. One way that USAREUR supports those objectives is by providing logistical support to the war effort.

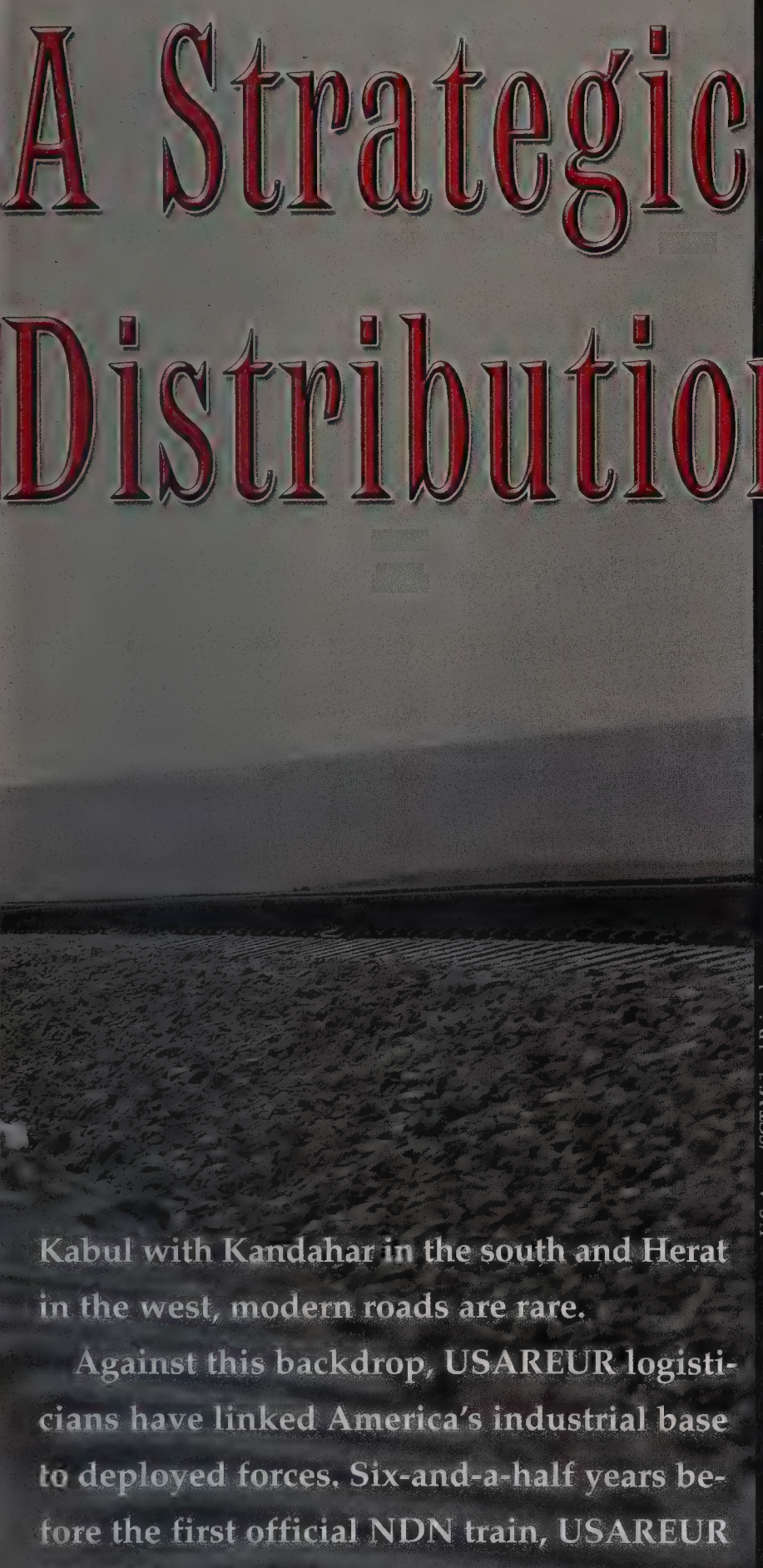
More than 51,000 containers shipped along the Northern Distribution Network (NDN) to support U.S. Central Command's (USCENTCOM) area of responsibility (AOR) have passed through countries in USAREUR's AOR since 2009.

The NDN has helped sustain a decade-long war in a landlocked country. Although it was once part of the ancient Silk Road, Afghanistan presents enormous logistical challenges: underdeveloped infrastructure, terrain features that have more in common with the moon than most inhabited parts of the Earth and neighbors who aren't always on the best terms with America.

Until the 21st century, only approximately 25 kilometers of rail track existed in Afghanistan: 10 kilometers to a border crossing with Turkmenistan and approximately 15 kilometers to a border crossing with Uzbekistan. Aside from the Ring Road linking

A Strategic Enabler Distribution Network

By Randal Kendrick,
Richard Hawkins
and
Brian Swan



U.S. Army/SGT Michael Reinsch

Left, a train rests on the new track built from the border of Uzbekistan to just beyond Mazar-e-Sharif, Afghanistan. The new track is more than 75 kilometers long and provides Afghan traders the means of importing and exporting goods.

Kabul with Kandahar in the south and Herat in the west, modern roads are rare.

Against this backdrop, USAREUR logisticians have linked America's industrial base to deployed forces. Six-and-a-half years before the first official NDN train, USAREUR logisticians quietly completed a combination of successful rail and truck missions to Afghanistan. While USAREUR proved this route could be a viable alternative, the primary surface lines of communication (LOC) would remain via sealift to Pakistan and over road into Afghanistan for the next six years.

Establishing the NDN Sea-Rail Route

In late 2008 and early 2009, U.S. Transportation Command (USTRANSCOM) was given the mission to establish an alternative to the precarious Pakistani ground LOC. In consultation with U.S. European Command (USEUCOM) and USAREUR strategic planners, USTRANSCOM gained diplomatic approval to use two major routes: the Baltic route of Latvia, Russia, Kazakhstan, Uzbekistan (or Kyrgyzstan, Tajikistan), and Afghanistan; and the Caucasus route of Georgia, Azerbaijan, Kazakhstan, Uzbekistan and Afghanistan. USAREUR's strategic,

U.S. Army/SGT Michael Reinsch

A train waits to move on the track between the Afghanistan border and Mazar-e-Sharif. The new train track provides hundreds of jobs to local Afghans.

enduring relationships with these countries played an essential role in obtaining the necessary diplomatic transit clearance and duty-free customs clearance to support the USCENTCOM area of responsibility.

In mid-2009, as conditions on the Pakistani ground LOC continued to deteriorate, other International Security Assistance Force (ISAF) nations began to show increasing interest in a northern LOC to Afghanistan. Supreme Headquarters Allied Powers Europe (SHAPE) took the lead in negotiating transit rights for ISAF-contributing nations, but SHAPE requested a third party to coordinate multinational transportation requirements. This coordination task went to the Movement Coordination Centre Europe (MCCE), which includes representatives from 25 countries. As the U.S. Army representative to the MCCE, USAREUR offered to coordinate transportation requirements through another MCCE member nation, Latvia, which offered a blanket contract under which ISAF-contributing nations could ship freight to Riga, where it would be consolidated for movement to Afghanistan. The use of "block" trains to move the freight was chosen because they have a significant advantage over individual container shipments: They move 30–50 percent faster, are more secure and enable a discount of 10–30 percent over the nonblock train container price. A minimum of 80 containers, however, is required to warrant a block train. The United States had sufficient container volume, but our multinational coalition partners did not. This lower volume of multinational cargo vis-à-vis U.S. cargo meant that multinational cargo could be relegated to slower, less secure and costlier train movements. Through the Military Surface Deployment and Distribution Command's NDN synchronization conferences, however, USAREUR advocated for U.S. assistance in moving multinational cargo. While transit agreements and customs concerns prevented the full commingling of U.S. and multinational cargo, USTRANSCOM agreed to USAREUR's request to allow multinational cargo in Latvia be joined to U.S. block trains at the Port of Riga. Since 2010, the MCCE has coordinated 14 trains through Riga.

The Europe-to-Afghanistan Route

In 2010, USAREUR logisticians continued to advocate direct shipments from the Defense Logistics Agency distribution depot in Germersheim, Germany, to Afghanistan. Several truck and rail companies in the USAREUR area of responsibility offered their services at lower prices than the existing NDN rates (20-foot container costs over the NDN ranged from $16,000 to $24,000 compared to $25,000 for a 40-foot commercial trailer with cargo equating to three 20-foot container equivalents). The biggest advantage, however, is time, as truck shipments from Europe average

*Randal **Kendrick** is deputy, Mobility Operations Division, U.S. Army Europe G-4. He is currently serving a one-year fellowship with the office of the Secretary of Defense. **Richard Hawkins** is a transportation management specialist in U.S. Army Europe G-4, optimizing distribution systems throughout the EUCOM area of responsibility. **Brian Swan** is chief of the Logistics Automation Branch, U.S. Army Europe G-4, providing hardware and software for all logistics automation and Standard Army Management Information Systems throughout the EUCOM area of responsibility.*

U.S. Army/SFC Pete Mayes

SPC Brandon Boone, a native of Montrose, Mich., and a material heavy equipment (MHE) operator for the 919th Inland Cargo Transfer Company (ICTC), moves a container with an MHE truck at the central receiving and shipping point. The 919th ICTC manages and moves all inbound and outbound cargo for Bagram Air Field and its surrounding forward operating bases.

49–75 days compared to 60–110 days for the ocean/rail NDN routes.

In September 2010, USTRANSCOM approved the Europe-to-Afghanistan (E2A) route as an official NDN alternate route. One year later, more than 1,220 20-foot-equivalent unit containers had been shipped over this route. Approximately 20 trucks depart Germersheim each week for deliveries to Afghanistan, transiting Germany, the Czech Republic, Slovakia, Slovenia, Hungary, Romania, the Black Sea, Georgia, Azerbaijan, Kazakhstan, Kyrgyzstan and Tajikistan.

USAREUR's role in the E2A route has been paramount. In accordance with USEUCOM Manual 4301.01, *Common User Logistics in the USEUCOM AOR*, USAREUR has traffic-management—and, by extension, diplomatic clearance—responsibility for the vast majority of countries in the USEUCOM area of responsibility. In this instance, USAREUR also has responsibility for obtaining diplomatic clearances from countries along the E2A outside of the USEUCOM area of responsibility. USAREUR's decades of experience with border crossings and its established relationships in the USEUCOM area of responsibility make this otherwise arduous task routine.

While direct rail shipments originating in the USEUCOM area of responsibility have not yet been approved, the potential exists for rail traffic departing from Germany to transit Poland, where it will be trans-loaded from standard-gauge to wide-gauge railcars, continue through Ukraine, Russia and Kazakhstan, and then either continue via rail through Uzbekistan or divert to truck for the Kazakhstan-Kyrgyzstan-Tajikistan route.

If approved, USAREUR would once again fill the critical role of obtaining diplomatic clearance for each country in the USEUCOM area of responsibility.

In-Transit Visibility

An essential element of an effective LOC is in-transit visibility (ITV). USAREUR G-4 subject-matter experts, in coordination with the Product Manager Joint-Automatic Identification Technology (J-AIT) office, successfully installed radio frequency identification (RFID) tag readers at the ports of Tallinn (Estonia), Riga and in the Republic of Georgia in 2010 and '11. The installation of RFID reduces the need for manual entries into current U.S. government tracking systems. RFID technology has helped improve visibility on the flow of cargo along the NDN and has prevented U.S. forces from having to reorder additional material en route to Afghanistan, resulting in millions of dollars in cost avoidance for DOD.

RFID/ITV is a major focus area for USAREUR in supporting Operation Enduring Freedom (OEF) and is made possible by USAREUR-fostered partnerships with the Republic of Georgia, Estonia and Latvia through the employment of RFID within the USEUCOM area of responsibility. USAREUR G-4, as USEUCOM's lead service agent for RFID/ITV, continues to engage Kazakhstan and Lithuania to establish visibility of DOD cargo at critical border crossings and ports along the NDN.

On the Horizon

In 2011, USAREUR established a multimodal operations hub at Mihail Kogalniceanu (MK) Air Base near the port of Constanta, Romania. Designed to support both the deployment and redeployment of USAREUR units to and from the USCENTCOM area of responsibility, MK is well suited to support retrograde movements of cargo from Afghanistan to Europe, or to the United States. Once the United States obtains retrograde transit approvals from the NDN countries, cargo could move via rail from Afghanistan using the Uzbekistan-Kazakhstan-Caspian Sea-Azerbaijan-Georgia-Black Sea route to Constanta, Romania. From Constanta, cargo could move via multiple modes to its final destination.

Through each of these efforts, USAREUR has demonstrated that it is a critical enabler to extend the strategic reach of our national power. ★

U.S. Air Force/MSgt. Cecilio Ricardo

IRAQ:

The Homecoming

The last convoy from Iraq has made it safely out. The gate at the Kuwait-Iraq border has been closed. The war that America fought in the desert and streets of Iraq is over. The colors have come home.

Accompanied by his principal staff, the last commander of U.S. Forces-Iraq, GEN Lloyd J. Austin III, landed at Joint Base Andrews, Md., on December 20, where they were met by President Obama, Vice President Biden, Deputy Secretary of Defense Ashton B. Carter and Chairman of the Joint Chiefs of Staff GEN Martin E. Dempsey. GEN Austin brought with him the U.S. Forces-Iraq flag, the arrival of which symbolized the official end of

U.S. Army/SSG Lynette Hoke

DoD/Erin A. Kirk-Cuomo

Top left: One of the final convoys of American troops leaving Iraq approaches the Kuwaiti border. Top right: A U.S. Forces-Iraq (USF-I) color guard retires the colors after the casing ceremony for the USF-I flag in Iraq. Bottom left: Soldiers from the 1st Cavalry Division inspect and inventory weapons in Kuwait for shipment back to Fort Hood, Texas, after leaving Iraq. Bottom right: From left, President Obama, Vice President Biden, Deputy Defense Secretary Ashton B. Carter, Chairman of the Joint Chiefs of Staff GEN Martin E. Dempsey and GEN Lloyd J. Austin III, the last commander of USF-I, salute during the ceremony to retire the USF-I colors at Joint Base Andrews, Md., after GEN Austin returned the flag to the United States.

DoD/D. Myles Cullen

U.S. Army/CPL Jordan Johnson

U.S. and Kuwaiti soldiers unite to close the gate at the Kuwait-Iraq border after the last U.S. convoy passed on December 18, 2011, signaling the end of Operation New Dawn.

the United States' direct participation in the conflict and the official homecoming.

"Today is a historic day, as we commemorate the return of the colors under which our armed forces fought so ably and proudly in Iraq, and marks the end of the second longest war in U.S. history," Carter said.

"Those of you who have arrived this morning bearing the flag of U.S. Forces-Iraq represent all those who have served—active duty, Reserve, National Guard and civilians," Carter continued. "We, who greet you here … represent a grateful nation. We welcome you. We're proud of you. We're in your debt."

The deputy secretary added, "To the families of the 4,500 troops who made the ultimate sacrifice, to the more than 30,000 troops [who] bear the wounds of this war and to their families, we lack the words to say what you feel on this day."

He continued, "This was a war that asked American troops to be great warriors and also much more—trainers, development experts, road builders and, ultimately, partners in helping the Iraqi people build a better and more hopeful future."

GEN Dempsey said, "This is a time to reflect on a generational journey—a journey of over 20 years that took us through two wars with Iraq to a new beginning in our relationship with Iraq. … It is a time to recall what we have achieved, what we learned and how we made a difference. And it is a time to remember those who served and those we lost. We all have our memories."

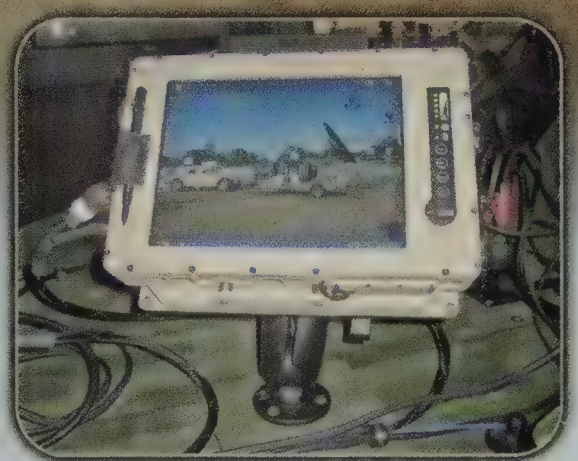
GEN Austin credited America's veterans of Iraq and their coalition partners with removing a brutal dictator, persevering through the darkest days of the insurgency and providing the Iraqi people with opportunities for freedom that they have not seen in their lifetimes.

"The last of our troops [have] crossed the border from Iraq to Kuwait," he said. "They did it in an orderly fashion, [and] they did it ahead of schedule. It is my privilege to represent them. I could not be more proud of our men and women in uniform who are unquestionably the preeminent military force in the world."

To the wounded veterans of Iraq and their families, GEN Austin noted that their fighting spirit "serves as a source of inspiration for us, and you will always have a place in our formation."

To all veterans and their families, GEN Austin said, "Please know that your sacrifices were instrumental in liberating an oppressed people, in providing them an opportunity to enjoy a better way of life. You have set the conditions for democracy to take root in a region that is critically important to the United States of America … again, thank you for a job extremely well done." ★

RAM® MILITARY MOUNTS



Contractors who trust RAM®

NORTHROP GRUMMAN

Raytheon

LOCKHEED MARTIN

GENERAL DYNAMICS

Rockwell Collins

TRW

THE RAM® MOUNT ADVANTAGE

- RAM® Shock Absorbing Mounts Protect Electronics for Improved Reliability
- Field Proven for Over 15 Years
- Made in the USA
- Lifetime Warranty

WWW.MILITARYMOUNT.COM

National Products, Inc. | Address: 8410 Dallas Ave. S., Seattle, WA 98108
Phone: (206) 763-8361 | Fax: (206) 763-9615
Website: www.ram-mount.com | Email: sales@ram-mount.com

The Mission Command

Center of Excellence:

Driving Institutional Adaptability

By BG Charles A. Flynn
and
BG Wayne W. Grigsby

The Army's strategic and institutional environment has changed. With strategic transitions out of Iraq and Afghanistan, our forces will require a significant amount of reinforcement and reconstitution in an era of fiscal constraint. Changes in strategic guidance are also prompting the Army to reassess how it will execute its roles, responsibilities and missions in the future. The adaptation of the "institutional Army" to support the Army's reinforcement, reconstitution and way forward will be particularly important—it will be up to organizations like the Training and Doctrine Command (TRADOC), Combined Arms Center (CAC), and the Mission Command Center of Excellence (MC CoE) to drive the key elements in this endeavor, primarily through doctrine, leader development and training.

A Driver, Facilitator and Supporting Team Member

The MC CoE had its beginnings in the development of mission command. This concept was widely written about by our senior leaders, beginning with GEN Martin E. Dempsey in his roles as the TRADOC Commander and the 37th Chief of Staff of the Army. He recognized that the Army had become more focused on staff-driven decisions than on those driven by the commander, including the integration of the warfighting functions during the operations process. Mission command's commander-focused approach is as applicable in the institutional Army as it is in the operational force, particularly in order for them to provide balanced and responsive support and the right mission-command capabilities for the current force and Army of 2020.

As a warfighting function, mission command is the first among equals because at its core it is the commander's responsibility to integrate all warfighting functions in time and space to accomplish the mission.

GEN Dempsey has stated that as a philosophy, mission command can be viewed as a way for our leaders to "drive toward operational adaptability by requiring a thorough understanding of the operational environment, by seeking adaptive teams capable of anticipating and managing transitions, and by acknowledging that we must share risk across echelons to create opportunities."

As a warfighting function, mission command is the first among equals because at its core it is the commander's responsibility to integrate all warfighting functions in time and space to accomplish the mission. It emphasizes the central role of the commander in using the art of command and the science of control to accomplish the mission. It is the warfighting function that addresses the role of information in warfare, at both cognitive and technical levels, through cyber/electromagnetic activities, inform-and-influence activities, and information and knowledge management. These functions are enabled and enhanced by the use of a mission command system that includes people, information systems, processes and procedures, facilities and equipment, and the network.

The MC CoE provides the operational and commander-focused perspective found in mission command to the generating force to ensure mission command requirements and solutions are developed, integrated and synchronized across the warfighting functions, centers of excellence and other organizations. The MC CoE is ideally suited to drive critical elements in this endeavor through concept and capability development, mission command doctrine, leader development, education, training, and network integration.

Leader Development, Education and Training

The MC CoE will drive change in the Army in the areas of leader development, education and training for mission command, and the development of command posts and the network to support mission command. In particular, the oversight of leader development, education and training for mission command are core requirements for the MC CoE. To drive and sustain change within the Army, the MC CoE must be an essential player in forums that address these topics across the force. Some initiatives to improve leader development, education and training will be led by the MC CoE; others will be in support of other organizations. Regardless, the MC CoE will partner with all of the schools and centers, CoEs, and leader development, education and training institutions to jointly fulfill mission command responsibilities and requirements for the Army.

After a decade of war, the Army certainly knows how to fight and has been incorporating the principles of mission command in operations around the world. These principles, however, have only recently been codified in doctrine and educational systems, so they do not yet, as GEN Dempsey has written, "pervade the force. Until they do—until they drive our leader development, our organizational design and our materiel acquisitions—we cannot consider ourselves ready, and we should not consider ourselves sufficiently adaptable" for future contingencies.

As leaders like Generals William E. DePuy, Donn A. Starry and Paul F. Gorman understood and leveraged following the Vietnam War, doctrine is the driver of change in the Army—from its operating concepts and principles to the structure of the force. These things affect how we fight, how we are structured and how we prepare for the next conflict.

The Army is changing its doctrinal framework to meet the new strategic and operational environments. To meet the challenges of technological advances, demands from

---

BG Charles A. Flynn *is the deputy commanding general of the 82nd Airborne Division, Fort Bragg, N.C. He previously served as the acting commanding general of the Combined Arms Center and the director of the Mission Command Center of Excellence, Fort Leavenworth, Kan. He has commanded forces at every echelon during his 26-year career. He holds a bachelor's degree from the University of Rhode Island and master's degrees from the U.S. Naval War College and the National Defense University.* ***BG Wayne W. Grigsby*** *is the director of the Mission Command Center of Excellence at Fort Leavenworth. Previously he served as the director of the School for Advanced Military Studies; the chief of International Security Assistance Force Joint Command's Future Operations Cross-Functional Team during the Afghanistan surge; and the commander of the 3rd Brigade Combat Team, 3rd Infantry Division, during the Iraq surge.*

WE ALL SERVE

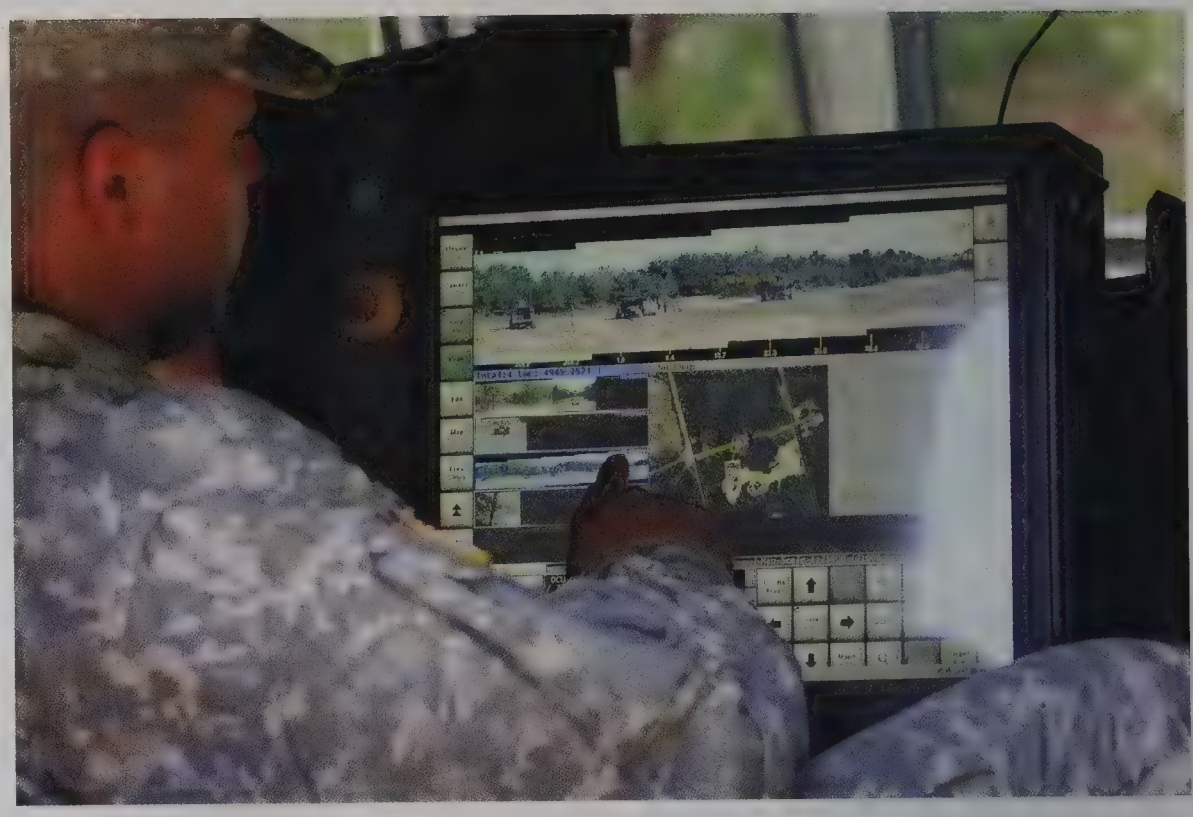
BOB BARRETT, VICE PRESIDENT OF HAWAII BASED COASTAL WINDOWS WITH EMPLOYEE AND U.S. ARMY RESERVE SERGEANT MICHAEL ECHIVERRI.

ARMY NATIONAL GUARD ★ ARMY RESERVE ★ NAVY RESERVE ★ MARINE RESERVE
COAST GUARD RESERVE ★ AIR NATIONAL GUARD ★ AIR FORCE RESERVE

We all serve. Whether serving our communities or our country, members of the National Guard and Reserve depend on their military units, families, and employers for support. Employer Support of the Guard and Reserve is a Department of Defense agency that seeks to promote a culture in which all American employers support and value the military service of their employees by recognizing outstanding support, increasing awareness of the law and resolving conflict through mediation.

ESGR®
EMPLOYER SUPPORT OF
THE GUARD AND RESERVE

1555 WILSON BOULEVARD, STE 319, ARLINGTON, VA 22209 ★ 1-800-336-4590 ★ WWW.ESGR.MIL



U.S. Army/Russell Meseroll

The network as a weapon system has become a new paradigm for the Army force within the Mission Command Center of Excellence (MC CoE).

the field and the dynamic operational environment, the Army is currently revolutionizing the way it develops and distributes doctrine through Doctrine 2015, an initiative that will produce fewer doctrinal publications that are more concise, more accessible and current. It completely restructures the Army's body of knowledge and streamlines the number and length of current doctrinal manuals while leveraging current technologies, such as the MilWiki platform, to inject fresh and contemporary knowledge into our doctrine. This will result in faster revisions, retaining enduring concepts and gaining lessons from battlefield-experienced warriors.

The first manual to be published under this new framework is Army Doctrinal Publication (ADP) 3-0, *Unified Land Operations*. This publication is the central unifying concept that will drive the development of every other aspect of Doctrine 2015. The central idea of *Unified Land Operations* is that Army units seize, retain and exploit the initiative to gain and maintain a position of relative advantage in sustained land operations and create conditions for favorable conflict resolution. This publication is the first in the Army to take the overarching lessons from the recent decade of war and use them to direct the actions of the Army toward anticipated threats to our nation.

One of the keys to Doctrine 2015 will be capturing the lessons learned for integration into doctrine and all aspects of capability development. This will be done through the MilWiki platform and also through the Army Lessons Learned Forum, which will provide operational force commanders the venue to talk directly to the generating force soldiers and civilians working to develop capabilities for their operations. Inputs will be incorporated into doctrine, training, leader development, education and other capability development efforts.

Just as the MC CoE has begun to reform how the Army captures lessons learned and develops doctrine, it has also begun to integrate them into forums dedicated to leader development, education and training. In the area of leader development and education, MC CoE is partnering with the Center for Army Leadership and other elements of the CAC's Leader Development and Education arm to create appropriate programs of instruction and educational curricula that include the elements (philosophical and technical) of mission command.

In the training realm, MC CoE is partnering with U.S. Army Forces Command (FORSCOM) and CAC's training arm to ensure that mission command principles and technical capabilities are integrated into courses and exercises. In particular, MC CoE is working to develop training support packages on mission command network capabilities so that the technical solutions we provide are understood all the way down to the user level.

Finally, through counterinsurgency seminars conducted by the Army's Irregular Warfare Fusion Cell at Fort Leavenworth, Kan., MC CoE has also affected leader development and training. These seminars provide an intellectual starting point for brigade combat teams as they begin their collective training in preparation for deployment. While the seminars focus on providing a baseline understanding of insurgency and counterinsurgency, they also teach the unit the concepts of mission command and how to think about using the network to support the unit's mission.

The central idea of* Unified Land Operations *is that Army units seize, retain and exploit the initiative to gain and maintain a position of relative advantage in sustained land operations and create conditions for favorable conflict resolution.

Through all of these elements, from doctrine like *Unified Land Operations* to leader development, education and training initiatives, MC CoE is driving change in the Army by integrating combat experiences and broader unique personal ones of our leaders into institutional processes.

PFC Matthew Zajac, US Army, 2nd Infantry Division, Fort Carson, Colorado and his father, Mike, photographed at a Fisher House in San Antonio, Texas.

The Hero Miles program reunites families during times of tragedy by providing free air travel to wounded or injured service members, their families and loved ones. Since its inception five years ago, the public's generosity has allowed us to distribute more than nearly 17,000 free airline tickets, saving our heroes and their families close to $22 million.

Free Hero Miles tickets have been issued to fly service members home from military/VA hospitals and to transport loved ones to military medical centers while their wounded family members receive urgent care. But the program is completely dependent upon the caring of frequent flyers like you. Help reunite America's heroes with their families this year by donating your frequent flyer miles to Hero Miles. It will leave you with a feeling that will send you soaring.

For more information, visit **www.fisherhouse.org** and click on *Hero Miles*.

HERO MILES

The Hero Miles program is grateful to our generous partners, including:
AirTran Airways ★ Alaska Airlines ★ American Airlines ★ Continental Airlines ★ Delta Air Lines
Frontier Airlines ★ Midwest Airlines ★ Northwest Airlines ★ United Airlines ★ US Airways

Hero Miles is a program of the nonprofit Fisher House Foundation.
More information on the Foundation can be found at www.fisherhouse.org.

©2009 Fisher House Foundation / Brendan Mattingly Photography / Don Schaaf & Friends, Inc.

Only when we integrate our doctrine with our experiences, education and training will we be able to fully implement and use mission command to adapt and prepare the Army for the future.

Command Posts And the Mission Command Network

To operationalize mission command for use by the force, the MC CoE is working to create command posts that emphasize providing support to the commander, who in turn uses the network as a weapons system and treats bandwidth as a class of supply.

Bringing mission command out of the schoolhouse and into the operational force requires a tangible element that can be used by commanders and their staff in the field. The cornerstone of this effort is the command post. This is much more than a building or tent containing radios and Internet drops. A command post is the system by which the commander gains and distributes shared understanding and utilizes his forces to best achieve the mission—it is an extension of him. This can occur from a hard-stand headquarters, a tent, or from a vehicle or airframe on the move. Wherever the commander is linked in to provide the art of command and the science of control is his command post.

Our impression, from both Afghanistan and the recent Network Integration Evaluation (NIE) the Army conducted at Fort Bliss, Texas, is that 10 years of combat working from relatively fixed locations and the rapid rate of technological change have eroded a significant amount of our proficiency in planning and employing the network in an austere and immature environment. This problem may be even more acute when we execute our traditional combined arms maneuver role of fighting by echelon to synchronize actions in time and space and move our command posts to positions of advantage as a land force.

A command post is the system by which the commander gains and distributes shared understanding and utilizes his forces to best achieve the mission—it is an extension of him.

Working with FORSCOM and a wide range of players across the Army and industry, the MC CoE has made strides in this area by increasing a cultural shift away from stationary, bloated headquarters and tactical operation centers toward command posts. Command posts provide the commander what he needs to conduct mission command, whether that is in a fixed command post, platform-based command post (ground, air or water-borne) for mission command on the move, or a dismounted soldier capability. The MC CoE is also emphasizing the need to be able to pass information to our joint and multinational partners. We must develop standard processes and systems that can communicate and facilitate our efforts, but this does not mean a single program on a standardized set of computer hardware.

Inherent in the development of the command post concept is network integration that ensures that all command post systems form a coherent whole to support the commander. The MC CoE has focused significant energy this past year on both helping integrate the network through the Army's Agile Process and ensuring that the leader development, education and training products for these systems are available for commanders and their staffs. The Agile Process evaluates network approaches and introduces new information technology into the network through bi-annual NIEs, which allow us to see how well we are integrating our network, making use of the latest technology, and working with industry to tailor commercial off-the-shelf technology to meet our requirements.

Inherent in the development of the command post concept is network integration that ensures that all command post systems form a coherent whole to support the commander.

The Army has been fairly effective at producing and providing technology solutions to our formations but dreadful at providing the supporting education and training down to the user level. This is exacerbated when commercial off-the-shelf products are introduced to fill mission requirements because the institutional support is not planned for or available. A significant focus of the MC CoE, then, has been working with stakeholders across the Army on developing and providing the education and training support of all procured and provided elements of the network.

This begins by creating a new paradigm in our force—that the network is a weapon system. We would not send our soldiers to war without the ability to shoot and maintain their small arms, nor should we shortchange their proficiency in creating, maintaining and using their network. In today's information-dominated environment, how we connect, acquire and distribute information is as powerful a determinant of unit performance as the ability to fire ballistic weapons systems or maneuver forces. Furthermore, considering it to be a weapon system facilitates the integration of the network into each warfighting function and during operations.

Proficiency with this weapon system begins and ends

with the education and training we provide to our soldiers and leaders—from the rifleman to the company commander to the operational/strategic level commander. Everyone in the unit must understand how the network connects them and can facilitate the movement of information to the commander, from whom they can then distribute guidance to their formations. This is where the MC CoE is working to institutionalize how education and training are provided on the integrated use of network systems. This must be done not only at the combat training centers and when deployed but also at home station. Leaders and soldiers are developing the art of employing the network and fighting by using the network and mission command systems every day, not just in the train-up and execution of a deployment. Our soldiers and leaders need more repetition on the systems to build confidence, which in turn—and over time—develops a mastery of the entire array of tools and mission command systems. Given the speed of the changes in technology and speed of war, the use and maintenance of the network must be a daily activity, just like the maintenance of vehicles, the qualification of weapons or the physical fitness of our soldiers.

U.S. Army/SPC Ida Tate

The MC CoE influences major areas of responsibility that are critical for the institutional Army to adapt—today and in the future.

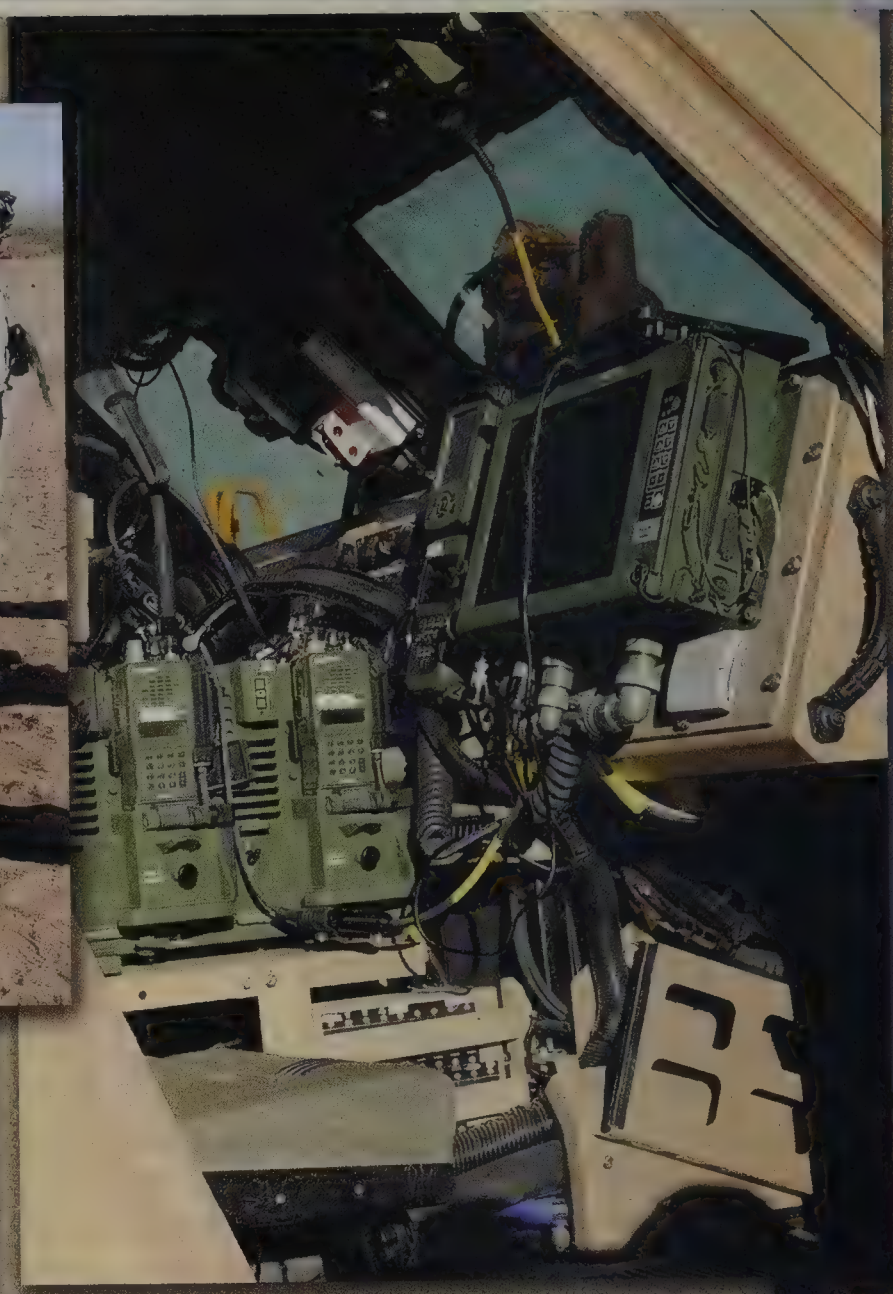
The Future of the MC CoE

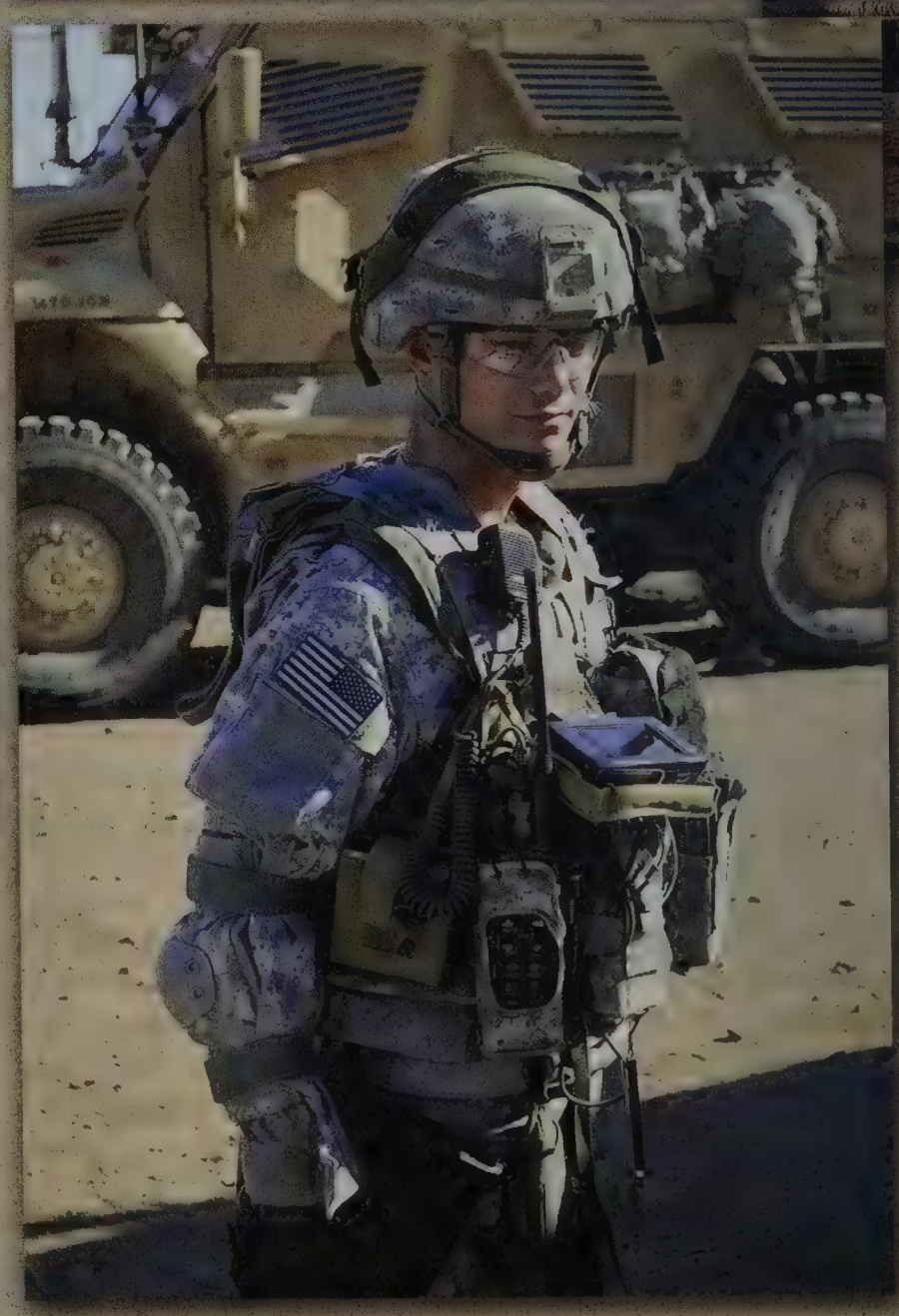
While the MC CoE has been critical in the proliferation of mission command principles and DOTMLPF (Doctrine, Organization, Training, Materiel, Leadership and education, Personnel, and Facilities) solutions throughout the Army, much work remains. The MC CoE was designed as a lean headquarters and has experienced a significant learning curve as it has come online. The roles and responsibilities among the MC CoE, CAC, other Centers of Excellence, and subordinate, adjacent, and external organizations continue to mature—as they should. Included in this is continuing to drive forward efforts run by the force modernization proponents that are overseen by the MC CoE, including mission command (formerly command and control), electronic warfare, information operations, Army operational knowledge management, airspace command and control, personnel recovery, exploitation, security force assistance, combined arms operations, and full spectrum operations. In addition, MC CoE influences major responsibility areas in stability operations, protection of civilians and regional support group. Each of these areas is critical for the institutional Army to adapt to current and future operations, while also supporting the development of the doctrine, leader development, training and material solutions for the Army of 2020.

The MC CoE will also focus greatly on the growth of capabilities in the mission command proponent office while continuing to develop network integration efforts. One of the highest priorities will be to institutionalize mission command leader development, education and training to enable a greater understanding of its principles and network capabilities across the force. This will involve a holistic approach that includes identifying training, education and leader-development aspects of the network, which will be evaluated during the bi-annual NIEs at Fort Bliss. The MC CoE will support the Department of the Army and CAC's efforts on the Army Training Strategy and partner with them on the Mission Command Training Strategy and Mission Command Training Strategy Implementation Plan. In addition, the MC CoE is participating in the Army Learning Coordination Council (ALCC) and is taking an active role in the ALCC Tactical and Technical Competence and Lifelong Learner Soldier Competency Panels to ensure that mission command is appropriately integrated into leader development and education venues across the Army. This will ensure that mission command is appropriately implemented in Army schools and courses and that it is taught over a soldier's entire career.

The MC CoE will be expanding its efforts with the other Centers of Excellence in the next year as our capability and capacity grow. This process, including bi-weekly teleconferences between the director of MC CoE and the other CoE commanding generals, will formalize how mission command and the network are integrated across all of our warfighting functions. This has already paid huge dividends in preliminary discussions on key issues that affect multiple CoEs.

At this strategically important time in the evolution of our Army, the importance of an adaptable generating force cannot be overstated. Partnering with stakeholders across the Army, the MC CoE will be a driver, facilitator and supporting team member for change and the development of mission command capabilities. These partnerships will ensure that commanders and leaders have the ability and capabilities to conduct mission command and form the foundation for a robust, capable and expeditionary Army of 2020—the decisive land force that provides depth and versatility to the joint force. ★





Clockwise from top left: The robotic Polaris system was put through its paces at the Network Integration Evaluation (NIE) 12.1 last fall. The interior of another system being explored, the Point of Presence (POP) vehicle, is equipped with a range of command-and-control systems. The Joint Battle Command-Platform tracking system, which will transform communications for dismounted soldiers, includes networked handheld devices. The packable ground support equipment for the Miniature Aerostat Concept, a small tethered surveillance and reconnaissance flight system, was also evaluated.

NIE 12.1

Text and Photographs
By Scott R. Gourley

The Army is conducting a series of Network Integration Evaluations (NIEs), semi-annual field exercises designed to evaluate deliberate and rapid acquisition solutions and to integrate and mature the Army's tactical network.

The most recently completed NIE, dubbed NIE 12.1 (first NIE of fiscal year 2012), was conducted in October and November 2011 at Fort Bliss, Texas/White Sands Missile Range, N.M., and involved nearly 3,800 soldiers and 1,000 vehicles of 2nd Brigade Combat Team, 1st Armored Division (2/1 AD).

The current Army strategy involves building the network incrementally and dovetails with the "Capability Set" (CS) construct that

The POP (above left) is based on a mine resistant ambush protected all-terrain vehicle chassis. Left, the Army continues to mature programs like Warfighter Information Network-Tactical (WIN-T); WIN-T Increment Two now provides mobile satellite communications.

The optionally manned Bobcat with mine roller was another capability evaluated during NIE 12.1.

involves fielding an integrated set of network capabilities together on a two-year iterative cycle beginning with "bridge" capabilities in 2013 (CS 13), with the first "objective"package following approximately two years later (CS 15).

Outlining the NIE process, service modernization representatives note that experiences to date have convinced the Army to focus networking and modernization efforts on the nonproprietary Soldier Radio Waveform (SRW) and Wideband Networking Waveform (WNW).

The challenge in this approach is that currently the only solution that can deliver WNW to the soldier is the Joint Tactical Radio System (JTRS) Ground Mobile Radio (GMR). Based on NIE processes and other evaluations to date, however, that program will be phased out in an orderly fashion and end in spring 2012.

Although WNW is the ground-based link of the objective network (to be fielded in CS 15 beginning in calendar year 2015), that time frame allows the Army to informally explore other types of available data radios capable of importing the WNW. Formal exploration of radio options will follow, likely emerging as a "sources sought" notice from Joint Program Executive Office JTRS in early 2012.

The resulting strategy includes the fact that, as the Army continues to mature a radio to deliver WNW, it will also continue to mature programs like Warfighter Information Network-Tactical (WIN-T) and Nett Warrior, with all of those systems feeding into the objective network of CS 15. (Some see the possibility of Nett Warrior sliding into CS 13.)

The Army does not want to wait to field critical networking capabilities while waiting for those few pieces to mature, however. In fact, the Army has reached a point with technical maturity, integration maturity and operational value—as validated through the NIE process—at which it is able to solidify a bridge network that will be fielded as part of CS 13 and up to eight brigade combat teams beginning in calendar year 2013. While the decision process is still under way, it is believed that brigades deploying to Afghanistan will have priority in receiving CS 13.

The foundation for CS 13 during the recent NIE was a bridge network baseline fielded to 2/1 AD's 1-1 Cavalry element. That bridge/baseline contained Nett Warrior, Rifleman Radio (providing soldier connectivity down to squad level), WIN-T Increment 2 (now providing mobile satellite communications) and the Harris AN/PRC-117G radio operating the Advanced Networking Wideband Waveform (ANW2). (WIN-T Increment 2 was present at NIE 12.1 for "risk reduction" purposes. Formal testing of WIN-T Increment 2 is scheduled for NIE 12.2 in the spring of 2012.)

The 117G/ANW2 represents the bridge radio capability to provide company-level connectivity while a different WNW platform is matured. Evidence of the service commitment to the bridge network can be found in a $66.3 million mid-October 2011 order via the General Services Administration to Harris Corporation for Falcon III AN/PRC-117G multiband manpack radios "in support of the modernization of brigade combat team tactical communications."

Along with maturation of CS 13 by 1-1 Cavalry, 2/1 AD's 1-35 armor battalion, operating as an infantry battalion, used NIE 12.1 to work assessments of the Army's objective network that will be fielded beginning in the 2015 time frame.

Scott R. Gourley, a freelance writer, is a contributing editor to ARMY.

Army Vice Chief of Staff GEN Peter W. Chiarelli (left) receives a briefing at the NIE from COL Daniel Pinnell, commander of 2nd Brigade Combat Team, 1st Armored Division.

Quantifying the complete NIE 12.1 picture translated to two systems under test: Rifleman Radio undergoing initial operational test and evaluation and the SRW Network Manager, which is basically the brains behind how that waveform moves around the battlefield; 47 systems under evaluation; and continuing solidification of both bridge and objective architectures.

The NIEs encompass more than just networks, though. The venues are increasingly viewed as optimized arenas for the exploration of new capabilities by organizations like the Army's Rapid Equipping Force or the Joint Improvised Explosive Device Defeat Organization.

Some of these exploratory systems present at NIE 12.1 included the Miniature Aerostat Concept, tethered intelligence, surveillance and reconnaissance system; optionally manned Bobcat and Polaris systems with mine rollers; and a remotely operated Humvee dubbed Ghost Ship.

Reflecting on the significance of the recent NIE 12.1, COL Daniel Pinnell, commander of 2/1 AD, called it "a massive hardware/software integration effort and a massive multilayer effort to do integration that really has not been done before."

"Some of the things I'm most excited about are ... these handheld devices," COL Pinnell said. "This is the first time, really, under operational conditions, that we have seen a clear, stable, sustainable connection between the individual soldier and ... all of the databases that he needs to be updated by and update. He can see his own PLI [position location information] and the PLI of his other squad members and platoon members, and now that we have the threads worked out he is able to see the PLI of every other blue force around him. He is able to see FBCB2 [Force XXI Battle Command, Brigade and Below]—it actually works faster on his handheld than it does on the box in the truck, which is interesting. He is able to see an awful lot of the really great FBCB2 utilities, the most exciting of which, coupled with that, is that we have TIGR [Tactical Ground Reporting] imagery and TIGR database access. He is able both to update the higher level databases and pull from them.

"So now you have an empowered soldier on the ground in the midst of a village conducting a census or conducting a key leader engagement or conducting just security operations, and he is able to really understand, right now, where he is, where the threats are near him, historically what has happened there and who the key leaders are," he said. "That's an immense power down at the individual level, and we finally see it demonstrated here. Now the task is to stabilize it, improve its performance and make it work for the Army."

Outlining the complexity of the process, COL Pinnell pointed to "10 different handhelds and ... 15 different ways of routing" that were explored at NIE 12.1. "With these 10 different handheld devices you have a whole different batch of radios. Some radios are performing better than others in transferring data and voice. Some have a much longer battery life than others. Some are better at doing TIGR than others. Those are some of the questions that we are trying to answer right now for the Army: Which ones appear to work best? What's the best combination? And how do we combine them?

"Secondly, we are trying to answer that question on mission command on the move for the Army," he added. "What are the real requirements? Now that they have given us some of the initial solutions—and there's WIN-T Increment 2 and a set of mobile systems in the commanders' trucks—what's our feedback to them on the utility of that system, effectiveness of that system and the form-fit factor SWAP [size, weight and power] issues that go along with it?

"It took a long time to get the software and hardware integrated out here—a big challenge," he acknowledged. "But we probably did in three weeks what would have normally taken us a year or year-and-a-half in a lab or some other place because it is a forcing function to bring all of the soldiers, leaders, FSRs [field service representatives] and PMs [product/project/program managers] out here. We forced the issue."

In terms of integration results, COL Pinnell pointed to one of the new systems being explored, a "point of presence" (POP) vehicle. Based on a mine resistant ambush protected all-terrain vehicle chassis, the POP integrates a

The wearable computer system, Nett Warrior, with the Rifleman Radio that connects it to Army networks, was demonstrated during NIE 12.1.

range of command-and-control systems with both static and satellite on-the-move communications.

"My POP has real, no-kidding, full-speed access to TIGR—absolutely when I'm static and pretty good when I'm moving. It also has CPOF [Command Post of the Future] and FBCB2 JCR [Joint Capabilities Release] running on it," he said.

Noting the significance of the NIE lessons-learned opportunities, he added, "Part of the immediate feedback ... to the Army is that we need a single graphical user interface, not seven programs or even three programs."

After visiting NIE 12.1, Vice Chief of Staff of the Army GEN Peter W. Chiarelli reflected on the significance of the NIE events to the entire Army modernization process. "I think the NIE is just absolutely amazing," he said. "You may hear me talking about the problems that we are having out there [at White Sands], but we're having them out there and not giving a piece of equipment to a commander and telling him, 'You figure out how to make [two pieces of equipment talk to each other].' We're doing it out there. And we are doing the integration piece out there. Now we need to take the lessons learned and say, 'Okay, in the next development how do we make it easier to do it for the first time out there as we are going through the development of the piece of equipment?' A lot of that probably could have been done in the lab, quite frankly, especially when you realize that you have the same contractor putting them both together."

GEN Chiarelli pointed to another system example that he had been handed in prototype form just an hour earlier. The prototype was a wireless Nett Warrior design that used Bluetooth technology to eliminate the cable between the Rifleman Radio and the Nett Warrior data screen device.

"I think that the NIE is absolutely critical," GEN Chiarelli concluded. "I tell everybody, when you are buying a network—and realize that this is a network—we are not talking about a single piece of equipment. We are talking about a network. It's like building a tank. If you built a tank and you built the engine in one place, the hull in another place, the turret in another place, and the gun tube in another place, and you did not figure out how you are going to integrate them at the end, you might have the best gun tube in the world, the best turret in the world, the best hull in the world, and the best engine in the world. But when you brought them all together, if the turret doesn't fit in the hull and if the gun tube doesn't go into the turret, and if the hole in the engine compartment is not big enough to take the engine, you've got an integration problem. And that's what we are trying to do out here. We are trying to bring together the entire network. It is interdependent."

Upcoming events include NIE 12.2 this spring and NIE 13.1 in the fall, the latter considered by Army planners as the capstone activity that will yield the formal solidification of both bridge and objective networks. ★

NATIONAL MUSEUM
UNITED STATES ARMY

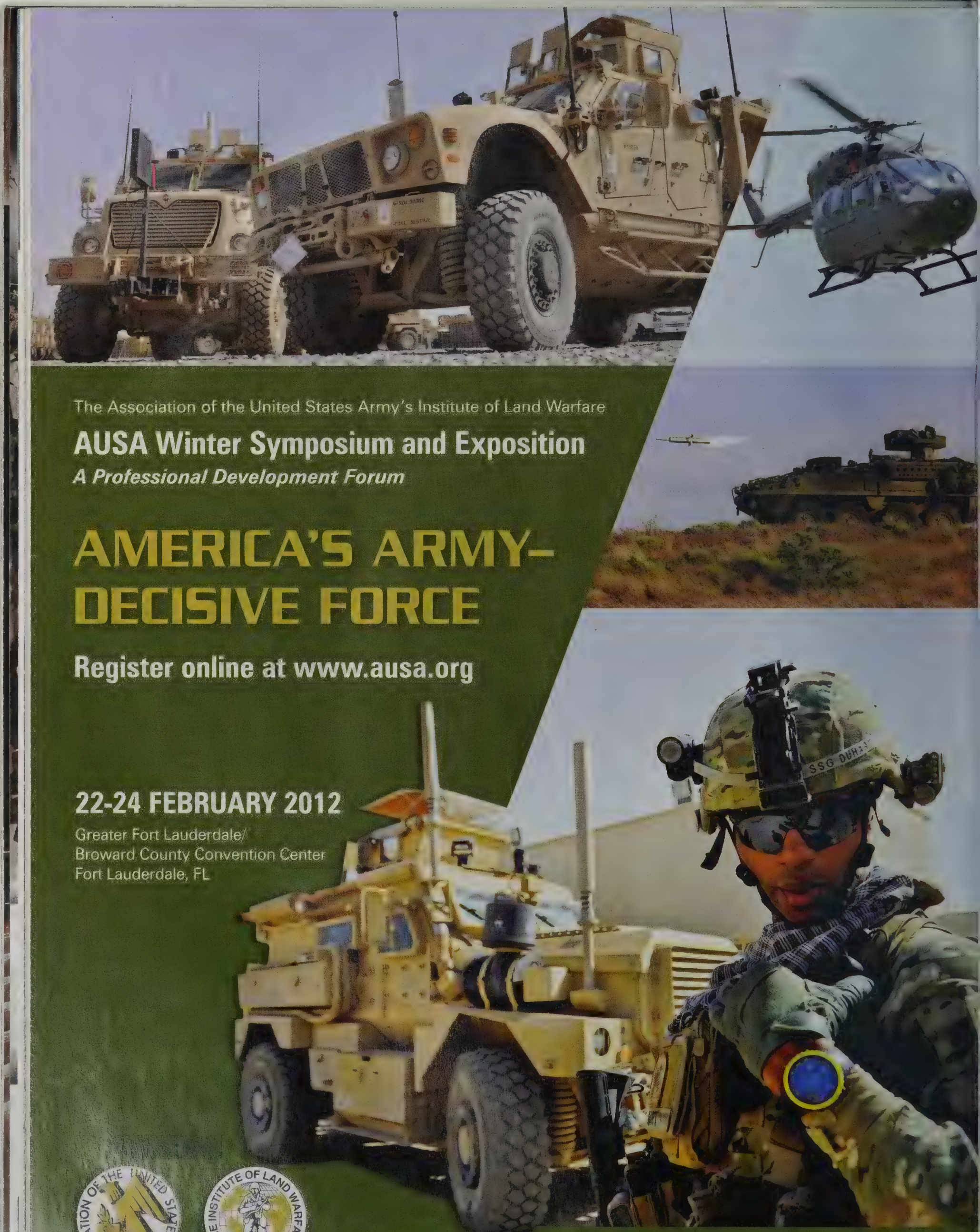
Honoring the Army and Its Soldiers

A great Army deserves a great Museum.

The National Museum of the United States Army, scheduled to open at Fort Belvoir, Virginia in 2015 will be the nation's one and only Museum to present the complete Army's history since 1775. Its immersive exhibits, soldier artifacts, and dynamic venues will tell the stories of selfless service and personal sacrifices of the 30 million American men and women who have worn the Army uniform.

For more information on how to support the National Army Museum, visit us online today!

www.armyhistory.org | **1-800-506-2672**



The Association of the United States Army's Institute of Land Warfare

AUSA Winter Symposium and Exposition

A Professional Development Forum

AMERICA'S ARMY– DECISIVE FORCE

Register online at www.ausa.org

22-24 FEBRUARY 2012

Greater Fort Lauderdale/
Broward County Convention Center
Fort Lauderdale, FL

FOR MORE INFORMATION CONTACT: AUSA, Industry Affairs, 800-336-4570, ext. 365

CompanyCommand

Building Combat-Ready Teams

To: Company Commanders
From: Company Commanders

Read2Lead: The Professional Reading List By and for Company-level Officers

What is one book that has made a practical impact on your effectiveness leading a platoon or company in the Army? Picture hundreds of company commanders and platoon leaders answering that question and including a comment about a specific way the book made a difference for them. Read2Lead, a Web page launched in 2010, does just that. It is situated inside the Platoon Leader/CompanyCommand online professional forums where members can vote for and comment on books as well as recommend books that are not yet on the list. The most recommended books rise to the top of the list, making a dynamic professional reading list that is by and for company-level officers. In just over a year, members have recommended 88 books, voted hundreds of times and posted 131 comments about how those books made a difference for them. Because Read2Lead is accessible only to members of the CompanyCommand and Platoon Leader forums, we thought it would be valuable to the broader Army profession to publish a listing of the current top 50 Read2Lead books. With the top 10 most recommended books, we include some comments from members.

The Read2Lead Top 10—And Commentary

1. *Once an Eagle* by Anton Myrer

Mike Runey: Sam Damon and Courtney Massengale are forever imprinted as leadership archetypes for our profession. In this engaging and fascinating epic of two leaders from pre-WWI through Vietnam, we see into the lives of men who are effective for entirely different reasons. Anton Myrer's novel exposes both the heroic strengths and tragic weaknesses of both officers, personally and professionally. I read this book pre-commissioning and again as a major. Both times I found the story captivating, challenging and fascinating. More importantly, I found Army leaders I respected using references to both officers, especially the hero, Sam Damon. As a young lieutenant, it became clear to me that this book is a part of Army culture.

Dave Gohlich: I read *Once an Eagle* just after the Infantry Officer Basic Course, and it had a big impact on how I saw my job as a PL [platoon leader]. Even though he's a fictional character, Sam's dedication to the Army, his focus on always doing the right thing, taking care of his Soldiers no matter the cost and always leading from the front have always stuck with me. I tried to ask myself, "What would Sam do?" when I was stuck in a tough spot as a young PL.

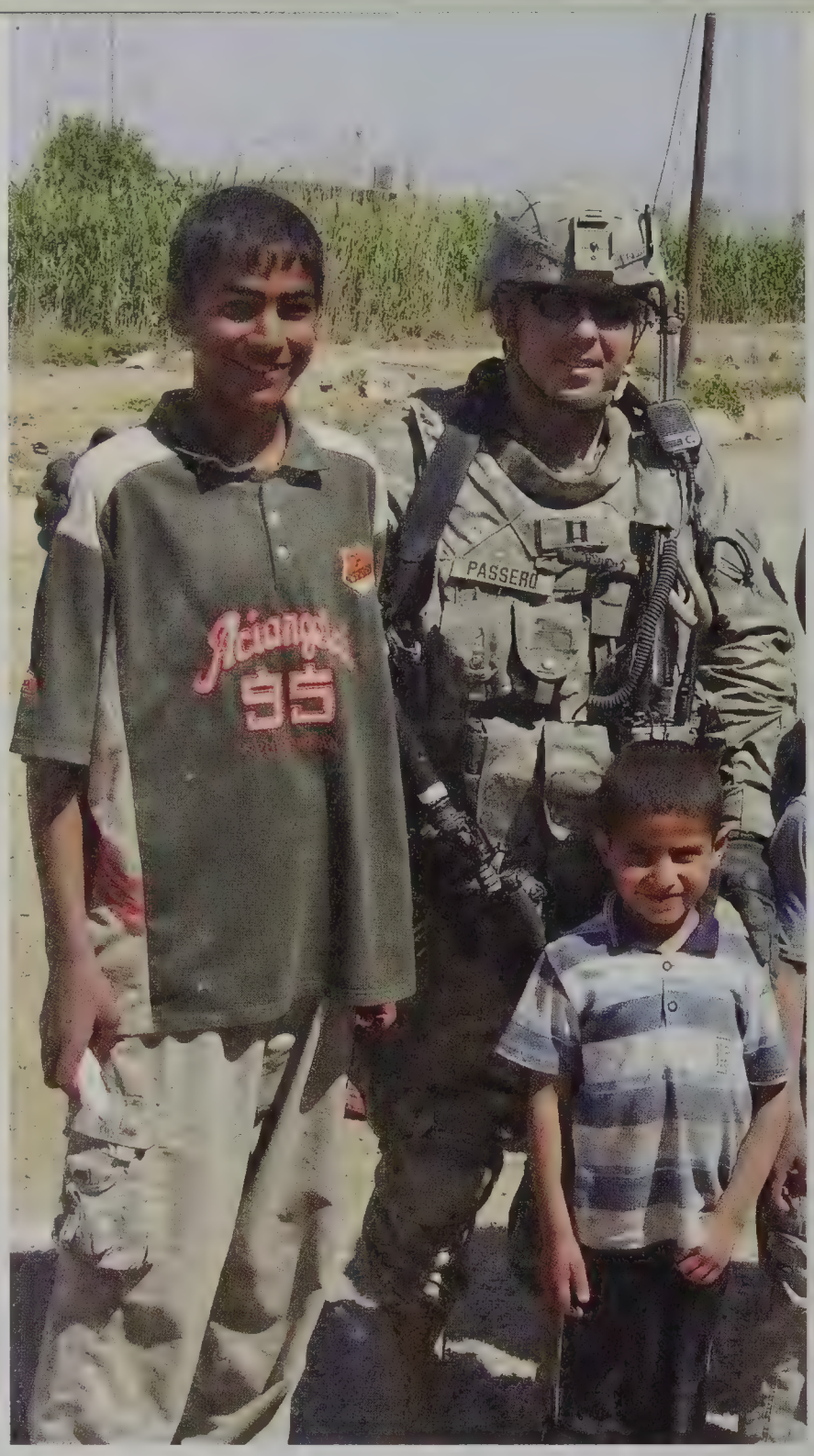
Patrick Snyder: I read this book as a corporal, and my copy is dog-eared, underlined and highlighted all over! I purchased copies of this monster for each of my lieutenants and gave them 90 days to read it before we sat down to discuss its message and how to apply it to our lives. It is by far the finest book I have read, and it continues to impact how I lead.

2. *We Were Soldiers Once ... and Young* by Harold G. Moore and Joseph L. Galloway

Pete Kilner: I read this while at the Infantry Officer Advanced Course. I was struck by how Hal Moore and his commanders knew their Soldiers, by the things Moore did to create a winning culture and by how unpredictable war can be. Another big takeaway was that despite the brutality and emotions of combat, a leader must remain calm, see the big picture, and anticipate the "next steps" for his unit and the enemy.

Tom Hiebert: We Were Soldiers was published just as I was getting ready to take command. The timeless value of the book then, as it remains to me to this day, is in demonstrating to young leaders the value of setting and maintaining standards and discipline in training as these translate directly to success in combat. Also, LTG Moore compares and contrasts the effects in combat of good solid leadership (and, again, standards and discipline) with the lack thereof in the second part of his book concerning the exploits of McDade and 2-7 Cavalry at LZ [landing zone] Albany. I tried to carry these lessons with me everywhere as a company commander.

Anthony Passero: I read this while I was a platoon leader



CPT Anthony Passero, in Iraq while commanding a company in the 56th Stryker Brigade Combat Team.

during the invasion of Afghanistan. It pointed out several very pertinent leadership lessons, which I followed and which were successful. They seem like simple lessons from Ranger School, but they can be easily forgotten when times get really tough. The first lesson was to take the tough route when the easy one is readily available. The enemy is probably waiting for you on the easy route. The second lesson was that a leader needs to be seen as someone who is thriving under a difficult circumstance. This will inspire Soldiers to do their best because they will push themselves if they see you doing the same. As I said, easy lessons, but they need reinforcement.

3. *Platoon Leader: A Memoir of Command in Combat* by James R. McDonough

Corey James: There are other books out there that pertain to our current operational environment, but not many that cover leadership like *Platoon Leader*. A relatively short book, it covers many timeless leadership principles from the perspective of a platoon leader in Vietnam. From this book I learned the basics of what it means to "take care of Soldiers" in combat and what Soldiers really expect from you.

James Harbridge: This was the single most influential book for me as a tactical leader. The lessons about the impact of the platoon leader/commander's personal example stuck with me when I first read the book. They continue to ring true every time I reread it, and I actually thought about them while performing under fire in combat. Our guys are always watching, and what we do matters.

A.J. Rooney: I read it as a cadet and it helped me see that the fundamentals we were learning applied in real-life scenarios. Specifically, *Platoon Leader* reinforced the principles of a defense and the principles of patrolling. The book taught me that the most effective way to ensure your security in a defense is to constantly patrol the surrounding areas.

Matthew Pritchett: I read this right before my deployment to Iraq and drew a lot of great parallels throughout the deployment. The front changes and the mission changes, but the face of battle (which happens to be the title of another good book) remains the same.

4. *Taking the Guidon: Exceptional Leadership at the Company Level* by Nate Allen and Tony Burgess

Jared Nichols: Taking the Guidon is a must-read for those preparing for command. No matter how ready you think you are for command, there is always something to learn before the first day you step in front of your formation. *Taking the Guidon* helped me to get my head in the right direction and to get up to speed on things I needed to take into consideration before I took command, while I was in command and when I was preparing to leave command. I valued the strategies to develop my command philosophy, prepare for my change-of-command inventories, plan a vision and apply that vision to my training calendar. This book helped me get the most out of my unit. (It is available as a free PDF file in the MilSpace Library.)

Dave Gohlich: I read *Taking the Guidon* my first week as a PL. As a young lieutenant I knew very little about how training schedules worked, but after reading the book I understood enough to get started. The "Big Rocks" idea really hit home, and I tried to get key training events up early on the training calendar and to defend them at all costs against the little ankle-biter requirements that always came up at the last minute.

Fran Murphy: I read it as a cadet, and revisited it as a lieutenant and captain and found it to be the definitive how-to book to be a dynamic company commander. The core ideas of the book—Big Rocks, Company Vision, 90-Day Plan (to name a few)—were so important to my success as a company commander. I read *Guidon* one more time late in command with my lieutenants and I continue to refer back to it.

5. *Black Hearts: One Platoon's Descent into Madness in Iraq's Triangle of Death* by Jim Frederick

Scott Horrigan: Read this book from the perspective of a leader in the book and ask yourself, "What could I have done differently?" This is a book that every leader in the military should read. It will change how you look at your or-

ganization and how you look at the role of leadership. It is a painful and truthful account of one of the darkest events to occur at the tactical level in contemporary military history.

Jim Craig: I consider this book a must-read for any deploying platoon leader. It is blunt and fair, and accurately describes the importance of leadership in the lives of our Soldiers and our units. This book is now required reading in my upper division ROTC [Reserve Officers' Training Corps] classes.

6. *Small Unit Leadership: A Commonsense Approach* by Dandridge M. Malone

Darrell Fawley: Throughout my commissioning process, combat leadership and tactics accounted for the overwhelming majority of my training. As a platoon leader, however, I needed to be able to do myriad other things like counseling wayward Soldiers and implementing training. I needed an answer to the question of what a PL does when he is not leading an operation, and this book served as an incredible guide for doing all the tasks I was called to do early and often as a platoon leader, such as train, counsel and develop. Now that I'm a captain, the book and my four pages of notes remain an invaluable reference.

Brian Kime: This book gets into the details about running a company, counseling troops, holding meetings, and setting goals as well as basic leadership. Malone intersperses the lessons with vignettes from Vietnam (where he was a battalion commander). I value it enough to have brought it with me to Afghanistan.

7. *On Killing: The Psychological Cost of Learning to Kill in War and Society* by Dave Grossman

Pete Kilner: This book opened my eyes to the psychological, physical and even moral impacts of killing another human being. As professionals of arms, we recruit, equip, train and order our Soldiers to kill. *On Killing* gave me a much deeper appreciation for what it's like to kill, as well as how I can help my Soldiers prepare for and make sense of killing in war.

C.J. Douglas: I read this book with my company leadership—officers and SNCOs [senior non-commissioned officers]—prior to deploying to Iraq each time. It served as a discussion primer for the company to talk about the human factors in combat.

8. *Band of Brothers: E Company, 506th Regiment, 101st Airborne from Normandy to Hitler's Eagle's Nest* by Stephen E. Ambrose

George Coleman: A great book about leading Soldiers in combat and the art of building a team under fire. It also has a case study on how not to lead. MAJ Richard (Dick) D. Winters recently passed away and is an iconic company commander that any junior leader can look up to for guidance and wisdom in leading Soldiers in combat. I'm currently in Afghanistan and in my most challenging deployment yet, but I take pause in knowing that it pales in comparison to the challenges and threats faced by Easy Company.

Brandon Scaturro: In his assault on Brecourt Manor, which is a textbook assault on a fixed position, MAJ Winters showed me how invaluable it is to delegate to my NCOs the key tasks (support by fire, assault and demolitions) and that I need to develop them as leaders and give them the chance to prove themselves. Winters, furthermore, is a role model to me when it comes to leading from the front, not only in combat but also in garrison. In the early days at Camp Toccoa, Ga., as LT Winters, he showed what it means to be in top physical condition as an officer, because it is the foundation and root of mental conditioning and toughness.

9. *Made to Stick: Why Some Ideas Survive and Others Die* by Chip Heath and Dan Heath

Jason Anderson: This is not a military book, but it taught me how to use a single event to make a point, or how to make something stick (in your head or that of your Soldiers, to be more precise). Find out how the Heath brothers demonstrate how a concrete example of one event can drive global change. Well worth the read!

Mike Eliassen: Getting your point across, the first time. The concepts are excellent and arranged to be immediately understood. Anyone who talks to people (which is each of us) will identify with "sticky" ideas.

Then-1LT A.J. Rooney meets with two members of the Iraqi Security Forces on an August 2010 patrol in Abu Dalef, Iraq.

Then-1LT Fran Murphy briefs A/1-77 AR in advance of a 2004 cordon-and-search operation north of Samarra, Iraq.

10. *Infantry Attacks* by Erwin Rommel

George Runkle: I found this book to be useful to me as a PL for three reasons: (1) It provided a real, practical example of why Ranger School is a lot of walking on very few calories; (2) That careful reflection on your own previous experiences sets you and your Soldiers up for later success; (3) Understanding that even famous combat leaders suffer battlefield exhaustion and PTSD [post-traumatic stress disorder]. There were several times that Rommel needed a "break" and was sent "for rest" to various places far back from the lines, sometimes for several months at a time. This book reminds me that every combat leader, even Rommel, will suffer from the emotional strain of combat.

Mike Eliassen: Classic. I have often found that Rommel's diagrams and detailed accounts of mission orders are the standard I have tried to make for my units. He understood tactics the way I would want to in the small-unit fight.

Tony Burgess: This is a classic story of a company-level leader in action in World War I. I read it as a platoon leader and own a copy of the 1979 Athena Press *Infantry Attacks* translation that is exceptional. The sketches of battles along with his narrative and observations are filled with relevant tactical and leadership insights. One consistent theme is his view that tough training and preparation for battle are the best way to take care of your Soldiers. It's all the more interesting when you consider that the book was written by a leader who would go on to become legendary in World War II.

Recommended Books 1–50

Note: These are in order, but some are tied—with the same number of votes. A dash rather than a number indicates that book is currently tied. Tied books are listed in alphabetical order.

1. *Once an Eagle* by Anton Myrer
2. *We Were Soldiers Once…and Young* by Harold G. Moore and Joseph L. Galloway
3. *Platoon Leader: A Memoir of Command in Combat* by James R. McDonough
4. *Taking the Guidon: Exceptional Leadership at the Company Level* by Nate Allen and Tony Burgess
5. *Black Hearts: One Platoon's Descent into Madness in Iraq's Triangle of Death* by Jim Frederick
6. *Small Unit Leadership: A Commonsense Approach* by Dandridge M. Malone
7. *On Killing: The Psychological Cost of Learning to Kill in War and Society* by Dave Grossman
8. *Band of Brothers: E Company, 506th Regiment, 101st Airborne from Normandy to Hitler's Eagle's Nest* by Stephen E. Ambrose
9. *Made to Stick: Why Some Ideas Survive and Others Die* by Chip Heath and Dan Heath
10. *Infantry Attacks* by Erwin Rommel
11. *A Message to Garcia* by Elbert Hubbard
12. *NIV Study Bible*
13. *The Prince* by Niccolò Machiavelli
14. *On Combat: The Psychology and Physiology of Deadly Conflict in War and in Peace* by Dave Grossman
15. *The Good Soldiers* by David Finkel
16. *Gates of Fire: An Epic Novel of the Battle of Thermopylae* by Steven Pressfield
17. *About Face: The Odyssey of an American Warrior* by David H. Hackworth and Julie Sherman

–*The Leadership Lessons of Jesus: A Timeless Model for Today's Leaders* by Bob Briner and Ray Pritchard

–*Principle-Centered Leadership* by Stephen R. Covey

20. *The Defence of Duffer's Drift* by E. D. Swinton

–*The Heights of Courage: A Tank Leader's War on the Golan* by Avigdor Kahalani

–*How to Win Friends and Influence People* by Dale Carnegie

23. *Team Yankee* by Harold Coyle
24. *The Forgotten Soldier* by Guy Sajer
25. *East of Chosin: Entrapment and Breakout In Korea, 1950* by Roy E. Appleman

–*Leadership and Training for the Fight: A Few Thoughts on Leadership and Training from a Former Special Operations Soldier* by Paul R. Howe

–*The Places In Between* by Rory Stewart

–*Steel My Soldiers' Hearts: The Hopeless to Hardcore Transformation of 4th Battalion, 39th Infantry, United States Army, Vietnam* by David H. Hackworth and Eilhys England

–*Street Without Joy* by Bernard B. Fall

30. *Good to Great: Why Some Companies Make the Leap … and Others Don't* by Jim Collins

–*The Village* by Bing West

32. *First Break All the Rules: What the World's Greatest Managers Do Differently* by Marcus Buckingham and Curt Coffman

–*Passion of Command: The Moral Imperative of Leadership* by Bryan McCoy

34. *Company Commander: The Classic Infantry Memoir of World War II* by Charles B. MacDonald

35. *Leadership: The Warrior's Art* by Christopher D. Kolenda

36. *Company Command: The Bottom Line* by John G. Meyer

37. *Beyond Band of Brothers: The War Memoirs of Major Dick Winters* by Richard (Dick) D. Winters and Cole C. Kingseed

–*The Defense of Jisr al-Doreaa* by Michael L. Burgoyne and Albert J. Marckwardt

–*Infantry in Battle* U.S. Infantry School

–*The Seven Habits of Highly Effective People* by Stephen R. Covey

–*Shackleton's Way: Leadership Lessons from the Great Antarctic Explorer* by Margot Morrell and Stephanie Capparell

–*Words for Warriors: A Professional Soldier's Notebook* by Ralph Puckett

43. *The Arab Mind* by Raphael Patai

–*Cigars, Whiskey and Winning: Leadership Lessons from General Ulysses S. Grant* by Al Kaltman

–*It's Your Ship: Management Techniques from the Best Damn Ship in the Navy* by D. Michael Abrashoff

–*Muddy Boots Leadership: Real Life Stories and Personal Examples of Good, Bad, and Unexpected Results* by John Chapman

–*The Soldier and the State: The Theory and Politics of Civil-Military Relations* by Samuel P. Huntington

–*This Kind of War: The Classic Korean War History* by T. R. Fehrenbach

–*The 360 Degree Leader: Developing Your Influence from Anywhere in the Organization* by John C. Maxwell

50. *The Mission, the Men, and Me: Lessons from a Former Delta Force Commander* by Pete Blaber

Pro-Reading Challenge

See "The Pro-Reading Challenge—One Achievable Step for Army Leader Development," in the February 2011 issue of ARMY Magazine for more about the PRC. The basic concept of the Pro-Reading Challenge is for teams of leaders to read and talk about developmental books with each other. We invite company commanders to take the challenge, and we give them the resources to do it. Commanders select a book, and we send them free copies to read with their lieutenants. We then establish a space in the online forum for them to talk about the book.

Company Commanders: Would you like to develop your platoon leaders? Sign up for the Pro-Reading Challenge by emailing Corey James (corey.james@us.army.mil).

Call to Action

Company commanders and platoon leaders: Log in to http://read2lead.army.mil and recommend a book that has helped you be a more effective leader. If you are not yet a member of the http://PL.army.mil or http://CC.army.mil forum, you will need to join your forum first. In closing, we would like to thank the 151 officers who have stepped up to contribute to the Read2Lead list:

Felipe Albino, Mohammed Amin, Jason Anderson, Justin Anderson, Tony Arredondo, John Bannister, Brad Barron, Robert Beale, Keith Bishop, Logan Blank, Greg Brannon, Heidi Bredlow, Heath Brown, Tony Burgess, Michael Burgoyne, Joseph Byrnes, Joe Chincuanco, Marina Codraro, George Coleman, Justin Coody, Tijuana Cookston, Jim Craig, Jonathan Cunningham, Matt Dalton, Marion Davis, Casey Dean, Anthony Del Vecchio, Steven Delvaux, Robert DiFilippo, Joseph Doty, Christopher Douglas, Eric Duckworth, Michael Eliassen, James Enos, Denis Fajardo, Darrell Fawley, William Ferguson, Jed Fisher, Kyle Fonay, Joseph Foust, Mark Franzen, Jonathan Freeman, Daniel Galloway, Christopher Gannon, Richard Gibson, David Gohlich, James Golby, Agustin Gonzalez, Russell Gordon, Jeb Graydon, Edward Guelfi, Anthony Hammon, Tom Handy, James Harbridge, Alexander Hernandez, Tom Hiebert, John Hollein, Scott Horrigan, Nicholas Howard, Timothy Hudson, Andrew Huntsman, Steven Jackowski, G. Scott Jackson, Wendell Jackson, Corey James, Kelly Jones, Nicholas Jones, Pete Kilner, Mindy Kimball, Ray Kimball, Brian Kime, Troy Kirby, Jason Kruck, Matthew Krupski, Scott Kuhn, David Lee, Denis Lombardo, Tommy Loux, Ari Martyn, David Matters, Paul Maxwell, Anthony Mayne, Matthew McBride, Brian McCarthy, Timothy McDonald, Michael Melancon, Christopher Mercado, John Miller, Matthew Miller, Steven Miller, Walter Mitchell, Peter Molin, Gamble Monney, Scott Morley, Michael Moyers, Fran Murphy, Michael Naylor, Lou Nemec, Jared Nichols, Emily O'Hara, Christopher Padgett, Gene Palka, Kassondra Palmer, William Parsons, Anthony Passero, Jason Patterson, Andrew Pfluger, Jeffrey Pickler, Matthew Pritchett, Michael Richardson, Dana Riegel, Jeremy Riegel, Nathan Rimpf, Jose Robledo Trujillo, A.J. Rooney, Adam Ropelewski, Mark Ross, Mandi Rowell, Mike Runey, George Runkle, Alama Rush, Cory Scanlon, Brandon Scaturro, Michael Schmidt, Todd Schultz, Jason Scott, Scott Shaw, Benjamin Shean, Jonathan Silk, Niel Smith, Patrick Snyder, Brandon Soltwisch, Bevan Stansbury, Michael Stanski, Mark Symonds, John Terhaar, John Thaler, Jon Walatkiewicz, Ben Weakley, Wyatt Welch, Paul Wenzel, Robert White, Nathan Wike, Bryan Williams, Austin Wilson, Cecil Wolberton, Shai-Lin Ynacay, Samuel Yoo, Peter Zaffina, Eric Zellars, John Zillhardt.

ASSOCIATION OF THE UNITED STATES ARMY

USA PAVILION

AT SOFEX 2012

7 – 10 MAY 2012

Book Your Space Now for the USA Pavilion

For USA Pavilion information and stand booking contact:

LexaLynn Hooper
Manager, USA Pavilion
T: +1 703 907 2666
E: lhooper@ausa.org

Amy Frankenstein
Sales, USA Pavilion
T: +1 703 907 2413
E: afrankenstein@ausa.org

www.ausa.org

SOFEX JORDAN

ASSOCIATION OF THE UNITED STATES ARMY

U.S. COMMERCIAL SERVICE
United States of America
Department of Commerce

Soldier Armed

M2A1/M240L

By Scott R. Gourley

Two new crew-served weapon systems now being fielded to U.S. Army warfighters provide the best features of proven and venerable weapons while also enhancing performance and lightening soldier load. The new systems now entering the field are the M2A1 .50-caliber machine gun and M240L (Lima) 7.62 mm machine gun.

M2A1

"We've been fielding the upgraded .50-caliber M2A1 as a replacement for the .50-caliber M2 since August 2011," said LTC Thomas Ryan, U.S. Army Product Manager (PM) for Crew Served Weapons. It offers "fixed headspace and timing [as well as a] quick change barrel.

"What we are doing with the M2A1 is addressing the number-one safety concern that we have with the M2," he explained. "The M2 is a phenomenal gun that has been out there since the 1931 time frame. Its performance is legendary, and there has been high soldier approval feedback for the weapon. But the [requirement to set] headspace and timing is both a training issue and [a matter of] practical application and employment of the weapon."

"If you don't set it correctly, you could have a malfunction in the weapon when you could get a round to go off inside the gun," he said. "You are not only risking damage to the weapon, more importantly you are potentially injuring a soldier. With our fixed headspace and timing we solve that problem. Not only that, we also make it easier to change barrels with the M2A1. The result is that the soldier is not 'out of the fight' as long."

The two improvements not only eliminate the tedious tasks of setting headspace and timing but also allow a soldier to change a barrel in less than a minute.

"A well-trained soldier can do it in seconds," LTC Ryan offered. "Then he's right back on the gun, and that's a pretty good thing."

Additional enhancements include a flash hider on the M2A1 barrel, providing a reduction in muzzle flash.

"When you look at an M2 firing in the dark it looks like a flamethrower," he said. "So this significantly disperses the flash and reduces that signature."

LTC Ryan also noted that the Army's "fleet" of M2 machine guns currently includes approximately 45,000 weapons and that M2A1 fielding is being accomplished through the swap-out of complete units to avoid any mixed fleet issues.

The M2A1 received type classification "standard" in 2010 (full materiel release achieved in August 2011), and 3,000 new weapons have been fielded to date. General Dynamics Armament and Technical Products is the prime contractor for the M2A1.

In addition, the Army has also provided approximately 2,000 quick change barrel kits to convert M2s to M2A1s during the weapons overhaul process at Anniston Army Depot, Ala. The conversion kits include several direct-replacement parts to modify existing M2 heavy barrel machine guns to the M2A1 configuration.

"That's an important piece of our strategy," LTC Ryan said. "We are doing what we've done for a long time when we overhaul an M2. Essentially that overhaul process in the past has allowed us to put out a 'new' M2, and now we are doing the same thing with the quick change barrel kits, so we

The M2A1 Quick Change Barrel (QCB) kit is an enhancement to the .50-caliber M2 machine gun that offers soldiers increased performance as well as new features and design improvements that make it easier and safer to use.

PEO Soldier

won't have to produce as many M2A1s by harvesting from the field."

LTC Ryan said that continuing warfighter requirements mandates the continued production of a limited number of M2 weapons in fiscal year (FY) 2012 "simply because we still have demands for M2s in the field and we can't deprive a unit of a capability and not replace it with the M2A1. Since we don't have enough M2A1s out there we still have a limited quantity of M2s —approximately 1,200—going out, and we are going to continue to sustain the M2s until we fully convert the fleet into M2A1s." The M2s are being manufactured by U.S. Ordnance, Inc.

In terms of improving life for the warfighter, Ryan summarized, "Eliminating the necessity for the soldier/gunner to set the headspace and timing on the gun [also] eliminates the number-one safety problem that we have with the existing M2. It's also going to make the soldier able to engage more targets and be more responsive when in the middle of a fight by reducing the amount of time he has to take to change a barrel. And doing all that will give commanders more flexibility on the battlefield."

M240L

"The new 7.62 mm M240 Lima is a phenomenal gun," COL Ryan continued. "The M240 is already a great gun; all we have done is make it better. How did we do that? Well, without changing the reliability of the gun we have made it 5 pounds lighter than the M240 'Bravo.'"

"We took the M240 Bravo, which was weighing in at 27 pounds, and we knocked that down to 22 pounds by using titanium construction in the receiver part of the gun," he explained. "We also have a short barrel and a collapsible buttstock on the 240L, so it makes it a little bit easier for the soldier, who has to dismount and maneuver to get around with the gun."

The initial weight of the M240B reflects its origins as a coaxial weapon on Bradley and Abrams armored vehicles in the late 1970s. Both Army and Marine Corps units looked at employing the weapon in a ground role in the mid-1990s as a possible replacement for the 7.62 mm M60 machine guns.

LTC Ryan said that the M240B "became popular because it was very reliable and durable. The frequency of maintenance is very, very low. Now, while it's not nonexistent, it's not as maintenance-intense as the M60 machine gun was.

"But the problem we had with the 240B was its length and its weight," he added. "It was longer and heavier than the M60. So reliability was what really sold the weapon to soldiers."

The Army turned its attention to reducing the weight and size challenges in a combined effort among the Project Manager Soldier Weapons, engineers at the Armament Research Development and Engineering Center (ARDEC) at Picatinny Arsenal, N.J., and manufacturer Fabrique National Manufacturing (FNM). (Current vendors for the M240B include FNM and Colt. The single current vendor for the M240L is FNM.)

"They sought to reduce the size and weight while still retaining all of the benefits we have in the 240 Bravo. And thus was born the 240 Lima," LTC Ryan said. "'Ounces are pounds and pounds punish,' so this is being well received by the field as a whole," he said, adding that the short barrel version still allows soldiers to "get out to those desired ranges."

The soldier benefits were acknowledged in selection of the M240L as one of the Army's "Greatest Inventions for 2010," with recognition to the team of PM Soldier Weapons, FNM, ARDEC, Army Research Laboratory, and PM Crew Served Weapons in getting this capability out to the force.

Fielding of the Limas began in November 2010.

The Army has received approximately 4,500 of the weapons as of this writing with approximately 1,700 of those guns now in support of operations in Afghanistan. Army-authorized acquisition levels for the M240L are approximately 9,700 guns.

A request for proposals closed in September 2011, with anticipated award in the second quarter of FY 2012 of a five-year contract for up to 7,200 guns. In addition to meeting Army requirements, contract options could also allow quantities to be made available to other services if they are interested.

"We will still have fieldings going on in FY 2013 for the 240L," Ryan said, "and, like most things, we will be looking for soldier feedback—and any way that we can improve the system we will.

"The M240L keeps the best features of the 240 Bravo, which are the reliability and durability of the gun, while still reducing the load by five pounds," he emphasized. ★

PEO Soldier

The M240L (Lima) 7.62 mm medium machine gun (light) reduces the weight of the existing M240B (Bravo) without compromising reliability. Constructed of titanium, the M240L weighs five pounds less than the M240B, has a shorter barrel and a collapsible buttstock, yet retains the durability that made its predecessor popular.

2012 ARMY Magazine Photo Contest

Sponsored by the Association of the U.S. Army

The Association of the U.S. Army is pleased to announce its annual ARMY Magazine photo contest. Amateur and professional photographers are invited to enter.

The winning photographs will be published in ARMY Magazine, and the photographers will be awarded cash prizes. First prize is $500; second prize is $300; third prize is $200. Those who are awarded an honorable mention will each receive $100.

Entry Rules:

1. Each photograph must have a U.S. Army-related subject and must have been taken on or after July 1, 2011.
2. Entries must not have been published elsewhere. Evidence of prior publication of any entry will disqualify it.
3. Each contestant is limited to three entries.
4. Entries may be 300 dpi digital photos, black-and-white prints or color prints. Photographs must not be tinted or altered. (Send digital photos to jwascher@ausa.org.)
5. The minimum size for prints is 5x7 inches; the maximum is 8x10 inches (no mats or frames).
6. A sheet of paper must be taped to the back of each entry with the following information: the photographer's name, address and telephone number, and caption information.
7. Entries must be mailed to: Editor in Chief, ARMY Magazine, 2425 Wilson Blvd., Arlington, VA 22201-3385, ATTN: Photo Contest.
8. Entries must be postmarked by July 31, 2012. Letters notifying the winners will be mailed in September.
9. Entries will not be returned.
10. Employees of AUSA and their family members are not eligible.
11. Prize-winning photographs may be published in ARMY Magazine and other AUSA publications three times.
12. Photographic quality and subject matter will be the primary considerations in judging.

For further information, contact Jocelyn Wascher (jwascher@ausa.org), ARMY Magazine, 2425 Wilson Blvd., Arlington, VA 22201; (703) 841-4300, ext. 204.

AUSA Sustaining Member Profile

FK-Logistics, USA LLC

Corporate Structure—President and CEO: Abdullah Al-Tammar. Corporate Headquarters: 8603 Westwood Center Drive, Suite 310, Vienna, VA 22182. Telephone: 703-992-8664. Web site: www.fklogisticsusa.com.

We all live and work on a big global stage. With each passing day, it feels like the world is only growing larger, but with growth come challenges. Moving goods and people from point A to point B while managing it all each step of the way is becoming more complicated. It makes no difference if your organization is big or small. The pressure is always on to find a solution to the world's logistical challenges—difficult terrain, unfamiliar routes or limited resources.

That's why FK-Logistics, USA LLC was created. FK-Logistics provides everything clients need to make that leap from point A to point B feel a bit less daunting.

As a Kuwait-based corporation, FK-Logistics has helped its worldwide clientele deliver everything and anything throughout the Middle East, Eastern Europe, Asia and Africa. FK-Logistics has expanded its reach, too, in a new division headquarters near Washington, D.C.

Time and time again, clients called upon the company's expertise when they needed it the most. Though no need is ever the same, the company has never fallen short of its commitments. FK-Logistics was proud to support a number of humanitarian missions for the Kuwait Red Crescent Society, the United Nations and countless other humanitarian groups, delivering emergency relief supplies to disaster victims.

In another display of confidence, the Department of Defense chose FK-Logistics to provide meals, laundry services and medical checkups to private contractors housed in Kuwait. The company then flew chartered flights into Afghanistan for those same personnel.

History shows FK-Logistics can answer the call at every stage of any operation. That's clear from the start. The company owns and runs a secured free port facility in Kuwait. The facility can dock up to three cargo ships at once. Clients feel assured knowing that this port comes equipped with onloading and offloading cranes and cargo ship repair capabilities.

When clients' goods arrive, FK-Logistics' extensive warehousing system can safely store them at any temperature. Whether these goods are dried, chilled, perishable or frozen, FK-Logistics has stored and moved it all. From baby food to blankets, from clothing to emergency shelters, nothing is too big or too small. Scheduled physical checks and other quality control measures guarantee that goods are given optimum care.

FK-Logistics' just-in-time delivery system ensures that products get to forward operating bases and that personnel reach their destinations safely. To that end, FK-Logistics relies on an unparalleled transportation network in the region, consisting of more than 1,300 air, sea and ground assets.

To tackle some of the world's most inhospitable terrain, FK-Logistics uses reefer, flat bed, side box or lowboy trucks. Vehicles come equipped with state-of-the-art loading and packaging systems, GPRS tracking and the latest in communication options. FK-Logistics' army of professionals stands ready with the licenses and training necessary to operate vehicles and machinery for any task.

Transporting by air is no obstacle, either. FK-Logistics manages one of the largest aircraft fleets in the area, with proven dependability in moving people and goods to the farthest reaches of the Middle East, Africa and Asia using its subsidiary, Gryphon Airlines. Gryphon's daily, round-trip flight schedule includes routes between Kuwait City, Baghdad, Kandahar, Bahrain and Dubai.

FK-Logistics also knows that the most responsive airline networks should offer flexibility. Thus Gryphon also offers charter flights to other destinations. An in-house ticket agency can book flights for civilian contractors and military personnel. Passenger safety is always paramount. Gryphon planes fly with a South African Civil Aviation Authority air operator certificate, while meeting flight safety and regulatory standards from the U.S. Federal Aviation Administration, European Aviation Safety Agency and International Civil Aviation Organization.

Through the years, FK-Logistics has provided flight assistance to an all-star roster, including Triple Canopy, the U.S. Department of Defense, the U.S. Army Corps of Engineers and numerous private contractors. In some cases, FK-Logistics flew its armada of MD-82s and MD-83s into Iraq, Kuwait and Afghanistan, transporting personnel and cargo at each stop. In all instances, Gryphon had no difficulty meeting any flight schedules.

If clients need more, FK-Logistics can call upon its vast network of diverse subsidiaries to provide construction, petroleum, food services and much more.

Ultimately, FK-Logistics' abilities are virtually unlimited.

Reviews

Firsthand Accounts from 'the Bulge'

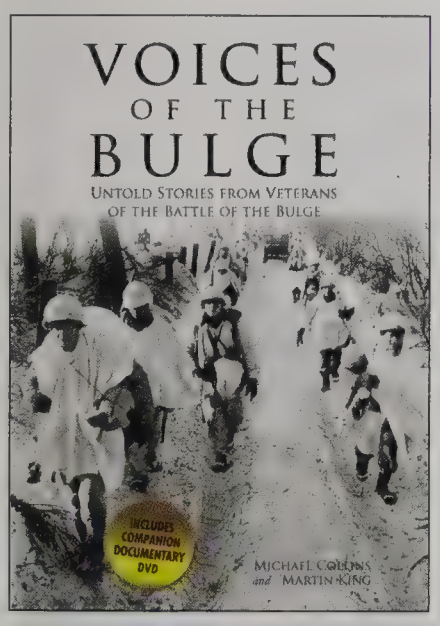
Voices of the Bulge: Untold Stories from Veterans of the Battle of the Bulge. *Michael Collins and Martin King. Zenith Press. 314 pages; photographs; maps; index; $29.00.*

By COL Cole C. Kingseed
U.S. Army retired

The Battle of the Bulge was the largest land battle ever fought by the U.S. Army. Code-named *Wacht am Rhein* (Watch on the Rhine) by Adolf Hitler, the combat raged over the Belgian countryside from mid-December 1944 through late January 1945. The conflict is still attracting an increasing number of historians seeking to present this cataclysmic struggle in a different light. In *Voices of the Bulge,* authors Michael Collins and Martin King have collected accounts from both military and civilian sources from both sides of the battle to provide new insight to war as seen from the perspective of the individual combatant. To preserve these reminiscences, a companion documentary DVD accompanies the book.

Collins is a historical interpreter and museum staffer for the New England Air Museum, the Destroyer Escort Historical Museum, the Irish American Heritage Museum, and the New York State Military Museum and Veterans Research Center. King is a military historian who lives in Belgium, where he researches and lectures in and around Europe's World War II battlefields. King also serves as a consultant for the History Channel and has conducted numerous staff rides for U.S. military personnel, NATO staff and other visiting dignitaries. Together, Collins and King remain determined that the veterans' voices be heard before that heroic generation fades from our collective memory.

Subtitled "Untold Stories from Veterans of the Battle of the Bulge," *Voices of the Bulge* is told through numerous veteran and eyewitness accounts. This work serves as a companion oral history to the documentary *Voices of the Bulge,* which Collins and King previously produced. The authors spent more than 12 years researching, interviewing and compiling information for this book and the film. By sprinkling their narrative with concise biographical sketches and personal vignettes, Collins and King succeed admirably in combining official combat histories with the reminiscences of the men and women who experienced war on the Belgian frontier in late



1944 and early '45. The result is a riveting tribute to the generation that experienced World War II firsthand.

The authors' intent is not to write the definitive account of the Battle of the Bulge but rather to concentrate on the perspectives of the soldiers and civilians who participated in the Ardennes campaign. In describing his personal inspiration for writing this book, Collins states that he never had the opportunity to know his grandfather, who served in the 10th Armored Division and who passed away before Collins was born. In a sense, Collins' grandfather represents the extraordinary generation that faced incredible adversity and struggled to defeat the forces of fascism and to preserve our freedom.

Collins and King's description of the Malmédy Massacre that occurred adjacent to the Café Bodarwe in the small village of Baugnez, Belgium, also merits special mention. On the day after the initial German breakthrough, *Kampfgruppe* (battle group) *Peiper* ruthlessly shot 86 defenseless American captives, most from Battery B of the ill-fated 285th Field Artillery Observation Battalion. To gain a survivor's account, the authors interviewed Ted Paluch, one of the last survivors remaining in the United States, as well as Manfred Thorn of the 1st SS Division, *Leibstandarte* Adolf Hitler. Not surprisingly, Thorn offers an opposing perspective.

In his book and DVD entitled *Mythos Malmédy,* Thorn claims that the Malmédy Massacre never took place. After much searching, King located Thorn outside Nuremberg. When approached by King for an interview, Thorn responded sternly, "The Malmédy Massacre was a setup; it never happened. Those bodies were placed there by U.S. intelligence to appear like they were all massacred. That is the end of it. I don't want to participate further, respect my decision." So ended the interview.

That the atrocity occurred, however, is indisputable. Indeed, the brutal murder of unarmed American prisoners outside Baugnez was but one of several atrocities attributed to specific German units operating under orders to precede their advance "by a wave of terror and fright and that no human inhibitions be shown."

Perhaps the most poignant chapter from *Voices of the Bulge* is "Christmas Eve on the Bulge." On that day BG Tony McAuliffe distributed an inspirational communiqué in which he informed the beleaguered garrison of Bastogne about the German demand for surrender, to which he responded, "Nuts!" That same evening, an intense German aerial bombardment ended the life of Belgian nurse Renee Lemaire, who, together with fellow nurse Augusta Chiwy, served with great distinction at the aid station of

the 20th Armored Infantry Battalion.

Lemaire was later featured in the HBO miniseries *Band of Brothers*. Chiwy, who suffered from selective mutism for many years following the war, did not speak of her wartime experiences until 1994. The authors interviewed Chiwy five years later. Chiwy's efforts were never recognized or acknowledged by the U.S. government, but along with Lemaire, she deserves the gratitude of this nation for administering to literally hundreds of its wounded warriors.

On the debit side, the coverage of the Battle of the Bulge lacks balance. The vast majority of the text is dedicated to the initial 12 days of the campaign. Collins and King devote a single chapter to "the end game" from December 28, 1944, to the end of January 1945. The reminiscences of veterans, both German and American, who fought during this critical phase of the battle would have greatly enhanced *Voices from the Bulge*.

That observation aside, Collins and King have produced a marvelous compendium of recollections from military veterans and the civilians caught up in the last significant German offensive on the Western Front. Collins now hopes that the veterans featured in *Voices of the Bulge* will fill in his own grandfather's story with their own experiences. Herein lies the true value of this remarkable narrative of war "from the ground up."

__COL Cole C. Kingseed__, USA Ret., Ph.D., a former professor of history at the U.S. Military Academy, is a writer and consultant.

The Right Men

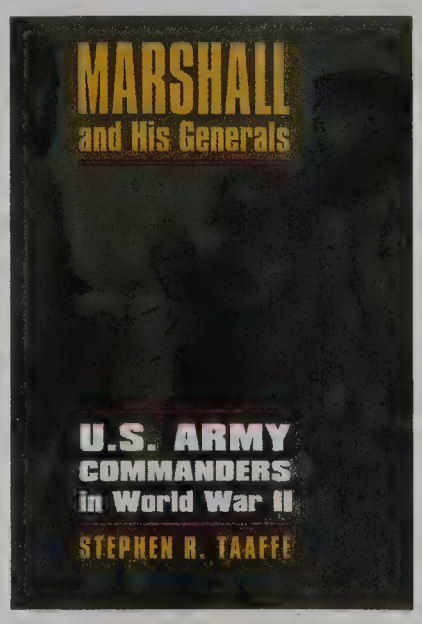
Marshall and His Generals: U.S. Army Commanders in World War II. *Stephen R. Taaffe. University Press of Kansas. 426 pages; index; $37.50.*

By COL James S. Wheeler
U.S. Army retired

Stephen Taaffe's new book, *Marshall and His Generals: U.S. Army Commanders in World War II*, provides a comprehensive and well-written collective biography of the U.S. Army's corps, army and army group commanders of World War II. Taaffe evaluates the record of the senior commanders of the U.S. Army ground forces in the war, while assessing GEN George C. Marshall's role in their selection for high command.

Thirty-eight men led the 20 corps, eight field armies, and three army groups that the American Army sent to battle in the European and Pacific theaters. Many of these men are well known, such as Omar N. Bradley, George S. Patton and Courtney H. Hodges, but many of them are relatively unknown. Taaffe makes these men as accessible for general readers as they are for military historians.

The title of the book is appropriate: Army Chief of Staff George C. Marshall selected most of the senior American commanders who led large formations in combat during the war. Taaffe points out that Marshall "had countless responsibilities as Chief of Staff, but he



believed that his most significant and difficult task was recommending officers for the President to nominate as generals and assigning them to their posts. ... There was a lot at stake because an army is no better than its leadership, so poor generals, or poorly placed ones could cost the country the war." Taaffe concludes that nearly all of the men selected for senior command vindicated Marshall's trust and proved to be competent, if often uninspired, battlefield leaders.

Marshall knew many of the senior officers he chose to lead the rapidly expanding American Army, but it was impossible for him to know all of the senior officers in the Army in 1939. Consequently, he relied on his closest advisors, Generals Henry H. (Hap) Arnold, Brehon B. Somervell and Lesley J. McNair, to identify promising officers to fill the command positions at division, corps and army level. Marshall's selections were generally successful as senior leaders. Of the 38 men who commanded at the corps and army level, only three were complete failures who were relieved from command "for cause." Most of Marshall's generals "fought capably, but ... did not have the chance to display the consistent brilliance that characterized [J. Lawton] Collins and [Lucian] Truscott." Taaffe considers Collins and Truscott the two "clearly outstanding corps commanders."

Taaffe used the papers of Eisenhower, Marshall and Patton—published and unpublished—extensively. He ably synthesized the standard memoirs and secondary sources to bring his subjects to life. My only major criticism as to sources is that he used GEN Omar Bradley's flawed autobiographies too often.

One of the major strengths of this book is that it looks at the Army's senior commander selection process on a global scale instead of solely in the European theater. The analysis of Marshall's relationships with his two major theater commanders, Dwight Eisenhower and Douglas MacArthur, connects the Pacific and the European wars in a way rarely done. Taaffe makes candid and well-supported assessments of his subjects and removes some of the polish from the reputations of Eisenhower, MacArthur, Bradley, Walter Krueger and Hodges. He also provides clear appraisals of senior generals who are often overlooked, such as Jacob L. Devers, William H. (Bill) Simpson and Alexander M. (Sandy) Patch.

Taaffe concludes that Eisenhower's

thinking about his senior leaders "was hardly objective and considered; his prejudices and personal preferences came through loud and clear." Ike "tended to value most those with whom he was in daily contact." Eisenhower was uncomfortable having people around whom he thought were too close to Marshall and might pose a threat to his position as supreme commander. This trait was demonstrated when he moved Devers and GEN Ira C. Eaker out of England and replaced them with his own team of Marine Corps Gen. Holland M. Smith, Bradley and GEN Carl A. Spaatz from the Mediterranean theater. Marshall gently called him on this but deferred to Ike. Eisenhower was insecure about his relationship with Marshall until at least the spring of 1944, and Devers seemed to him to be a ready replacement if Marshall faltered.

Taaffe's assessments of the senior leaders are interesting and generally well-supported. He notes that "Bradley, Krueger, Patch, Simpson, and Truscott were all capable field army commanders who amassed solid, though not brilliant, records during the war." On the other hand, even though "Marshall, Eisenhower, and Bradley thought the world of Hodges … their personal affinity seemed to blind them to his flaws. Whatever the First Army's accomplishments as Eisenhower's workhorse outfit, it deserved a better commander."

Taaffe introduces his subjects in a chronological fashion, as they become corps commanders during the war. He provides a description of each officer's professional background before selection for promotion to general officer rank. The career patterns that seemed to help promotion included successful attendance at the Command and General Staff School and the Army War College, although GEN James A. Van Fleet attended neither and LTG Manton S. Eddy, LTG Raymond S. McLain, GEN Frank W. Milburn and Truscott attended only the Staff School. Having a professional sponsor was also important to the men selected for higher command, with "Marshall and, to a lesser extent, McNair" the sponsors who mattered the most.

The attributes important for success in Marshall's eyes included integrity, initiative, a sense of duty, a can-do attitude, aggressiveness and drive. Marshall expected Army generals to serve where sent and to present a positive attitude in all circumstances. As the war progressed, most of the men selected for corps and command had combat experience as division commanders, but until the middle of 1944 such battle-tested leaders as Patch, Patton and Truscott were relatively rare. Of the three army group commanders (Devers, Bradley and Mark Clark), none commanded a division in combat, and only Bradley had commanded a corps and an army in battle. Eisenhower lacked any command experience in battle at the head of a division, a corps, an army or an army group. Yet all of these men demonstrated solid ability as very senior commanders.

Marshall and His Generals makes a valuable contribution to the study of senior military leadership in war. It is a refreshing approach to an understanding of how Marshall provided the nation with senior leaders and how well they did when given the opportunity to lead.

I recommend this book to three audiences: general readers, historians and active duty military leaders.

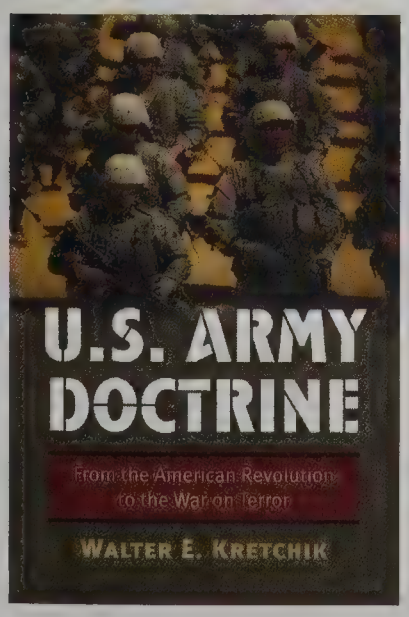
***COL James S. Wheeler**, USA Ret., served in the Army for 30 years. He is the author of four books, including* The Big Red One: America's Legendary 1st Infantry Division from World War I to Desert Storm. *He is writing a biography of GEN Jacob Devers.*

Varied Fare

U.S. Army Doctrine: From the American Revolution to the War on Terror. *Walter E. Kretchik. Kansas University Press. 392 pages; index; black-and-white photographs; $39.95.*

Until something better comes along, Walter E. Kretchik's *U.S. Army Doctrine: From the American Revolution to the War on Terror* will likely serve as the bible for tracing the evolution of U.S. Army doctrine from von Steuben's drill on the frozen fields of Valley Forge to tactics and techniques for kicking in doors in Kabul.

In his introduction, Kretchik rightly points out that while there are important and enduring studies on some U.S. Army doctrinal efforts (Bob Doughty's still widely read 1979 pamphlet *The Evolution of U.S. Army Tactical Doctrine from 1946–76* and John Romjue's *Active Defense to Airland Battle*), there is no first-class, accessible overview of



Army doctrine over the course of the nation's history. There have been other sweeping studies that have tried to look at the evolution of how the Army fights, most notably Russell F. Weigley's *The American Way of War: A History of United States Military Strategy and Policy* and Brian Linn's revisionist *The Echo of Battle: The Army's Way of War*, but none that focuses narrowly and specifically on the service's keystone doctrine. This book fills that niche nicely.

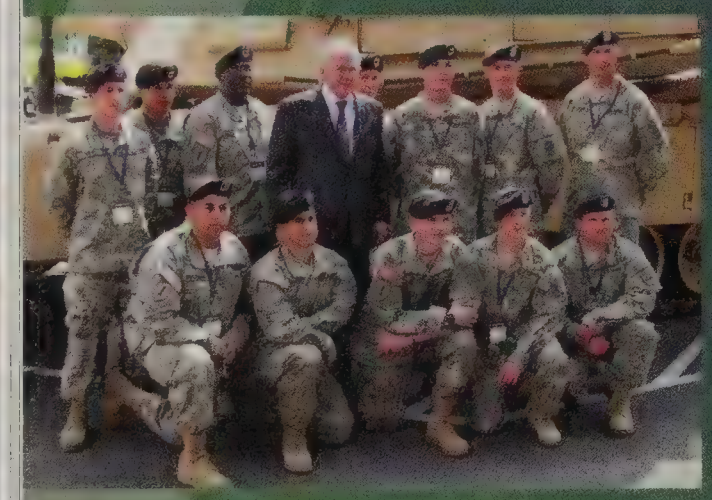
Kretchik suggests there are clear trends in Army doctrine evolving from the tactical products of the American Revolution, which focused primarily on drill and training, to more general warfighting tactics, techniques and procedures that were used during the Civil War. In the era from Appomattox to Versailles, Army doctrine covered all aspects of tactical warfare from logistics to open field maneuver. From World War II to today, it has broad-

ASSOCIATION OF THE UNITED STATES ARMY

USA PAVILION

AT 2012 EUROSATORY

11-15 JUNE 2012 / PARIS



Book Your Space Now for the USA Pavilion

www.ausa.org

EUROSATORY
11 - 15 JUNE 2012 / PARIS

For USA Pavilion information and stand booking contact:

LexaLynn Hooper
Manager, USA Pavilion
T: +1 703 907 2666
E: lhooper@ausa.org

Amy Frankenstein
Sales, USA Pavilion
T: +1 703 907 2413
E: afrankenstein@ausa.org

U.S. COMMERCIAL SERVICE
United States of America
Department of Commerce

ened to include the operational as well as the tactical levels of war.

Kretchik, a retired Army officer and associate professor of history at Western Illinois University, does a competent job of tracing the continuing struggles that pulled at Army doctrinal writers, including the back-and-forth between the influences of Napoleonic military theorists Antoine-Henri Jomini and Carl von Clausewitz. Both seem important influences in Kretchik's view. Kretchik also tracks the desire to focus on various methods of warfare. As he accurately notes, conventional war usually predominated over unconventional warfare.

Readers should be most interested in Kretchik's retelling of the fate of the Pentomic Army—a cautionary tale for today's military if ever there was one. The term *pentomic* drew its inspiration from the five battle groups around which forces would be organized and the short-range atomic weapons with which they would be armed.

For those interested in understanding how America's Army has thought about fighting future wars, *U.S. Army Doctrine: From the American Revolution to the War on Terror* will be a valuable resource.

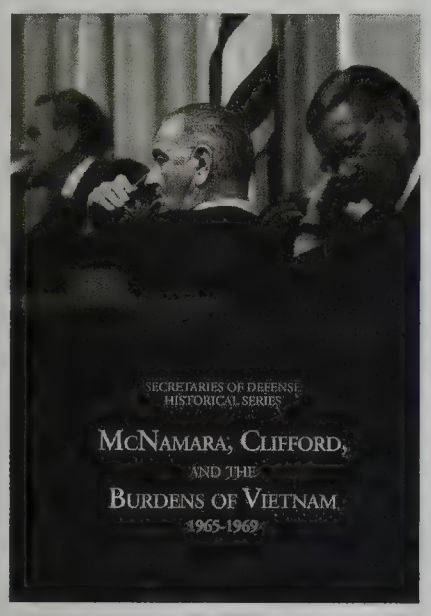
—James Jay Carafano

Secretaries of Defense Historical Series: McNamara, Clifford, and the Burdens of Vietnam 1965–1969. *Edward J. Drea. United States Department of Defense. 694 pages; black-and-white photographs; maps; index; $68.00.*

McNamara, Clifford, and the Burdens of Vietnam 1965–1969 is the sixth volume offered in the *Secretaries of Defense Historical Series*. The five previous volumes document the history of the Office of the Secretary of Defense (OSD). Volume VI marks a slight change in the series as reflected by the change in name to the *Secretaries of Defense Historical Series*. This change in title is meant to indicate a more acute analysis of the secretaries of defense and their staffs, rather than of the office itself.

This volume documents Robert S. McNamara's last three years as Secretary of Defense before resigning the role to his successor, Clark M. Clifford. Edward Drea captures this frustrating and tumultuous period for the OSD in the last four years of the Lyndon B. Johnson administration by shaping the account around the Vietnam War.

Although the Vietnam War served as the focal point for this era and for the author's historical account, Drea seeks to provide a broader and more



balanced view of the successes and failures of the OSD by contextualizing the Vietnam War amid the other world issues faced by the OSD.

Most conflicts occurring at this time, and unrelated to the war at hand, were glossed over in the face of Vietnam. Drea encourages the reader to understand that while McNamara and Clifford certainly made their fair share of mistakes, in order to accurately assess their OSD careers it is important to acknowledge that the full political landscape did not include the Vietnam War alone. Foreign policy issues and threats of instability in the Dominican Republic, Europe, NATO and the Middle East also proved troublesome.

—Katharine Scott

Lest We Forget: Masterpieces of Patriotic Jewelry and Military Decorations. *Judith Price. Taylor Trade Publishing. 160 pages; color photographs; $20.23.*

In *Lest We Forget: Masterpieces of Patriotic Jewelry and Military Decorations*, Judith Price, president and founder of the National Jewelry Institute, takes a new approach to remembrance by tracing military history visually through the artifacts that commemorate it.

From Napoleonic treasures to World War II cigarette cases, Price surveys a breadth of objects that range from functional to symbolic, ceremonial to personal. Using these decorations and ornaments, she reveals how momentous events in our country's history are represented with a pendant or medal, a gold eagle or silver star cluster.

Presented with the careful research and stunning visuals of an art exhibition, *Lest We Forget* contains pieces drawn from museums and private collections, such as the *Musée de l'Armée*, the West Point Museum and the Imperial War Museum. The resulting assortment spans almost 200 years of military history, from the Revolutionary War and the colonization of the United States to World War II. Price curates this assemblage into four themes: war, valor, memories and peace. In each section, she uses the artifacts to illuminate the spirit of particular historical moments and supplements her own research by interviewing experts on specific individuals, events or pieces.

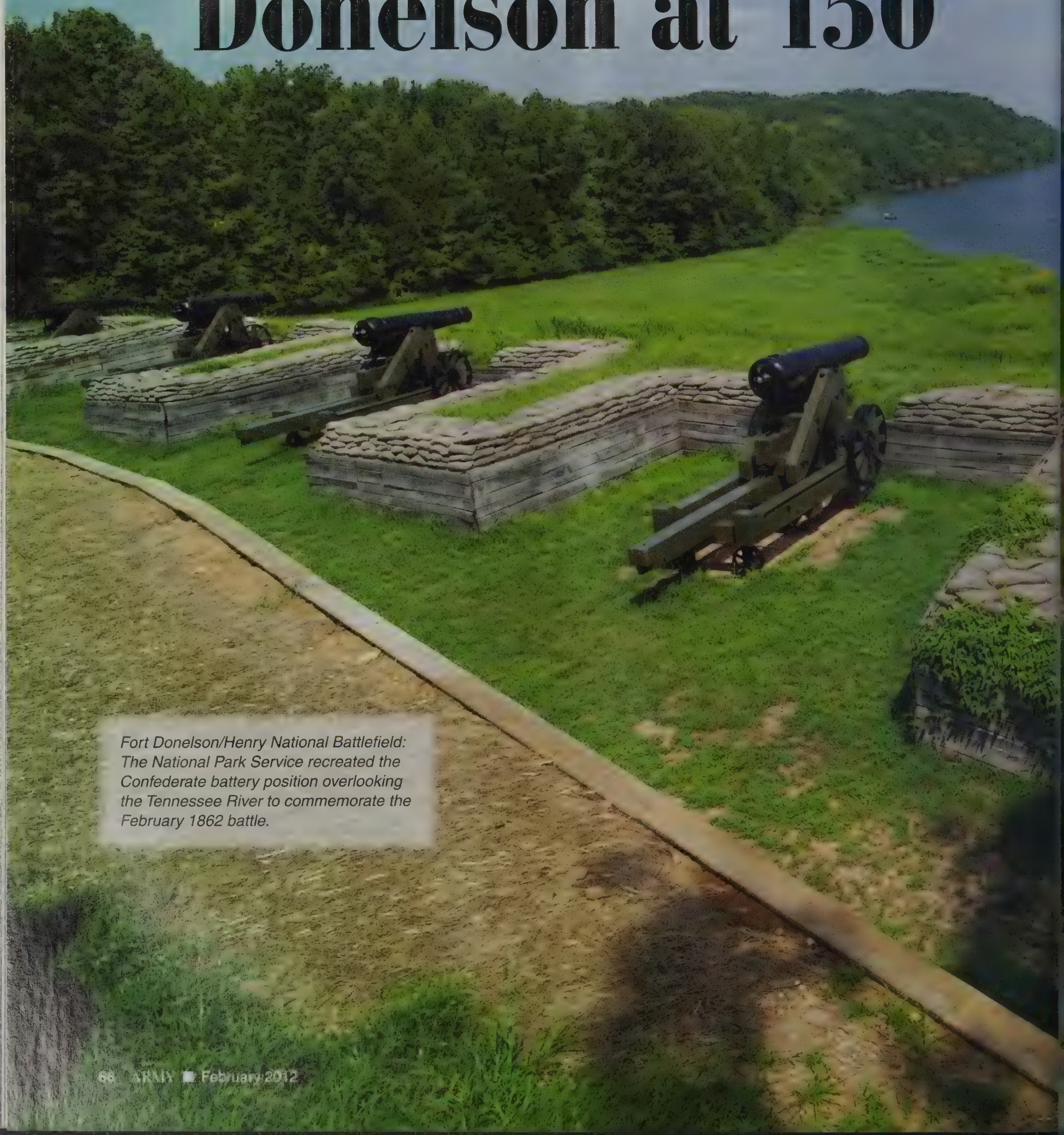
A particularly striking object is Pierre C. Cartier's 1943 Christmas gift to Franklin D. Roosevelt—an ornate and highly symbolic timepiece. The central clock is supplemented by four additional faces, representing the four different time zones in which Allied soldiers were deployed. Cartier's optimism in the Allied cause is reflected in the multiple hands of the clock, all synchronized to march forward together.

With its stunning images and meticulous research, *Lest We Forget* combines history and art into a book that won't be easily forgotten.

—Jocelyn Wascher

Historically Speaking

Forts Henry and Donelson at 150



Fort Donelson/Henry National Battlefield: The National Park Service recreated the Confederate battery position overlooking the Tennessee River to commemorate the February 1862 battle.

By BG John S. Brown
U.S. Army retired

The year 1861, as we saw in the November 2011 "Historically Speaking" article, ended badly for the United States of America. Not only had civil war rent the country, but also Federal efforts to reimpose control were met with a disaster at First Bull Run in July, followed by a lesser disaster at Ball's Bluff in October. The Army of the Potomac, now under the leadership of MG George B. McClellan, licked its wounds and undertook much-needed reorganization and training. How long this would take nobody knew, including McClellan. At sea, an initially leaky blockade got under way, but the excesses of the *Trent* Affair brought the United States dangerously close to war with Great Britain. In politics, the Joint Committee on the Conduct of the War emerged to provide a mix of supervision,

Photographs by Dennis Steele

Period guns and cannon are located at another Confederate battery position on the Tennessee River.

investigative oversight, meddling and partisan vendetta that would last the rest of the war. West of the Appalachians there had been a mixture of small-scale victories and defeats as Kansas, Missouri and Kentucky struggled to determine which side they were on.

One Union commander who had shown well in the initial chaos west of the Appalachians, BG Ulysses S. Grant, was a West Point graduate with a checkered past but commendable contemporary vigor. He secured Cairo, Ill.; preemptively seized Paducah, Ky.; and bested a larger Confederate force in a sharp engagement at Belmont, Mo. Now he was eager to test the cordon of strong points that Confederate commanders, under the overall command of GEN Albert Sydney Johnston, had thrown up across Tennessee and central Kentucky. On February 1, 1862, 150 years ago this month, MG Henry W. Halleck indulged him in his aggressiveness and encouraged him to launch. The vast expanses of the Western Theater were precariously tied together by a thin network of rail lines and by waterborne traffic on the Mississippi, Missouri, Ohio, Tennessee and Cumberland Rivers. These last two ran parallel for 60 miles across the breadth of Kentucky, pointing like a dagger at the heart of Tennessee, through which they continued. Mindful of the threat, the Confederates built Fort Henry and Fort Donelson to choke off traffic up the Tennessee and Cumberland Rivers, respectively. These vital forts, athwart jugular veins, were Grant's first targets.

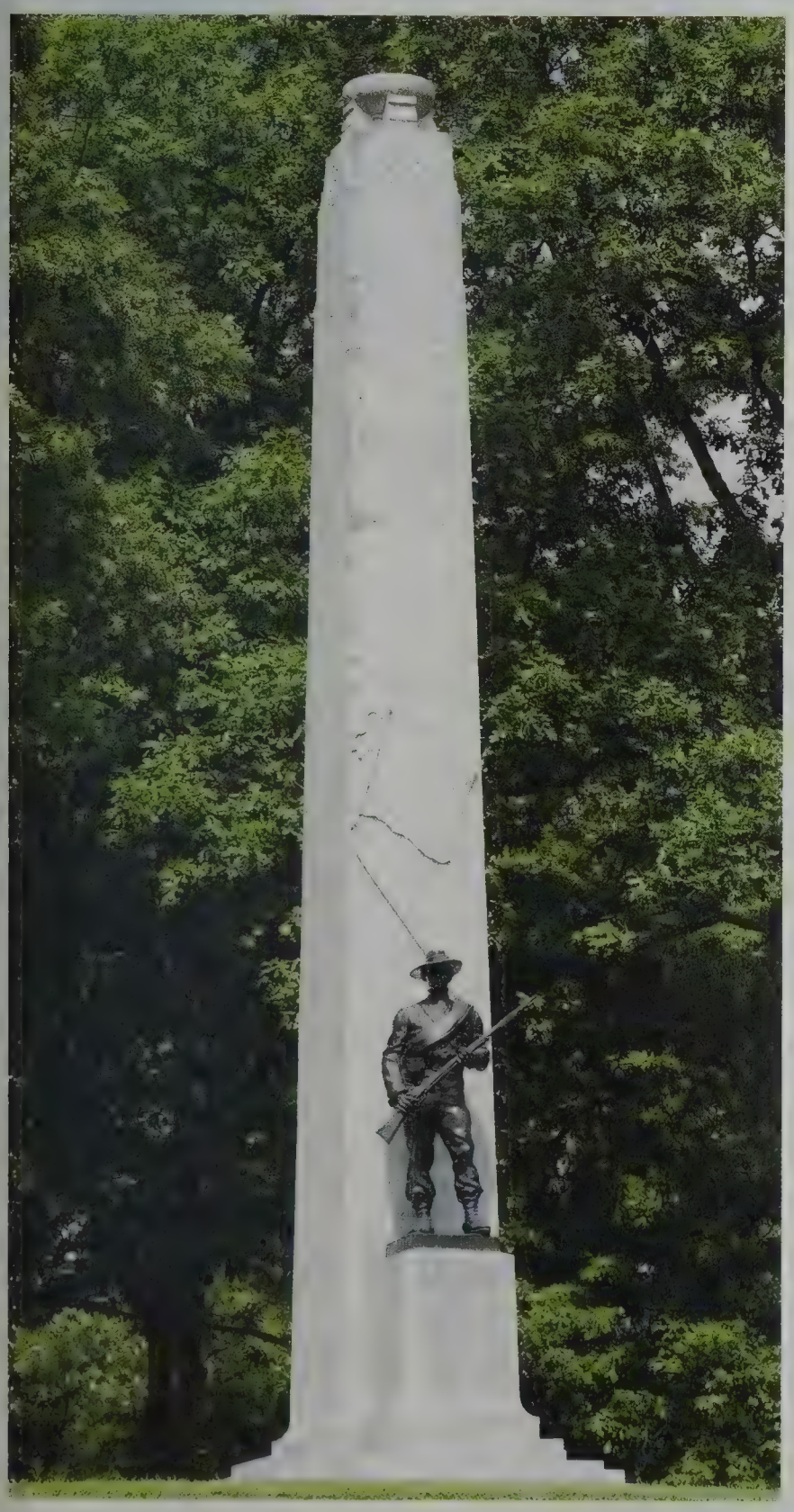
Grant was an innovator in what we now call operational art. The Civil War in the East maintained a Napoleonic character through much of its course. Great armies maneuvered in grand array to fight pitched battles across relatively familiar ground. In the West troops were fewer, distances vaster, civilization sparser and lines of communication more precarious. Circumstances lent themselves to deep maneuvers, meeting engagements and artful use of such modern technologies as trains, steamships and the telegraph. Grant knew less about Napoleon's battles than many of his contemporaries but perhaps grasped more of Napoleon's essence. He would use every means to speedily bring focused, unrelenting, decisive pressure on the enemy.

In the case of the approach to Fort Henry, Grant's innovative choice was via steamship. Hastily built armored gunboats led troop transports up the Tennessee River, plowing against the current but nevertheless arriving unexpectedly and disembarking expediently. This mechanized amphibious approach spared his troops more than 100 miles of marching and suddenly presented his outnumbered opponent with a division closing in from each side of the river. Considering his position now indefensible, Confederate BG Lloyd Tilghman dispatched the majority of his force to Fort Donelson, 11 miles away on the Cumberland River, keeping behind a tiny contingent to hold the fort. This contingent surrendered on February 6 after an audacious gunboat bombardment, before the ground troops had properly closed. With the Tennessee River open to him, Grant quickly dispatched his gunboats 20 miles farther upriver to destroy the sole crossing of the Memphis & Ohio Railroad over the Tennessee. This severed Confederate rail communications. With a single stroke, Grant gained mechanized access into the heart of Tennessee while denying his enemy the mechanized logistics to tie together their theater.

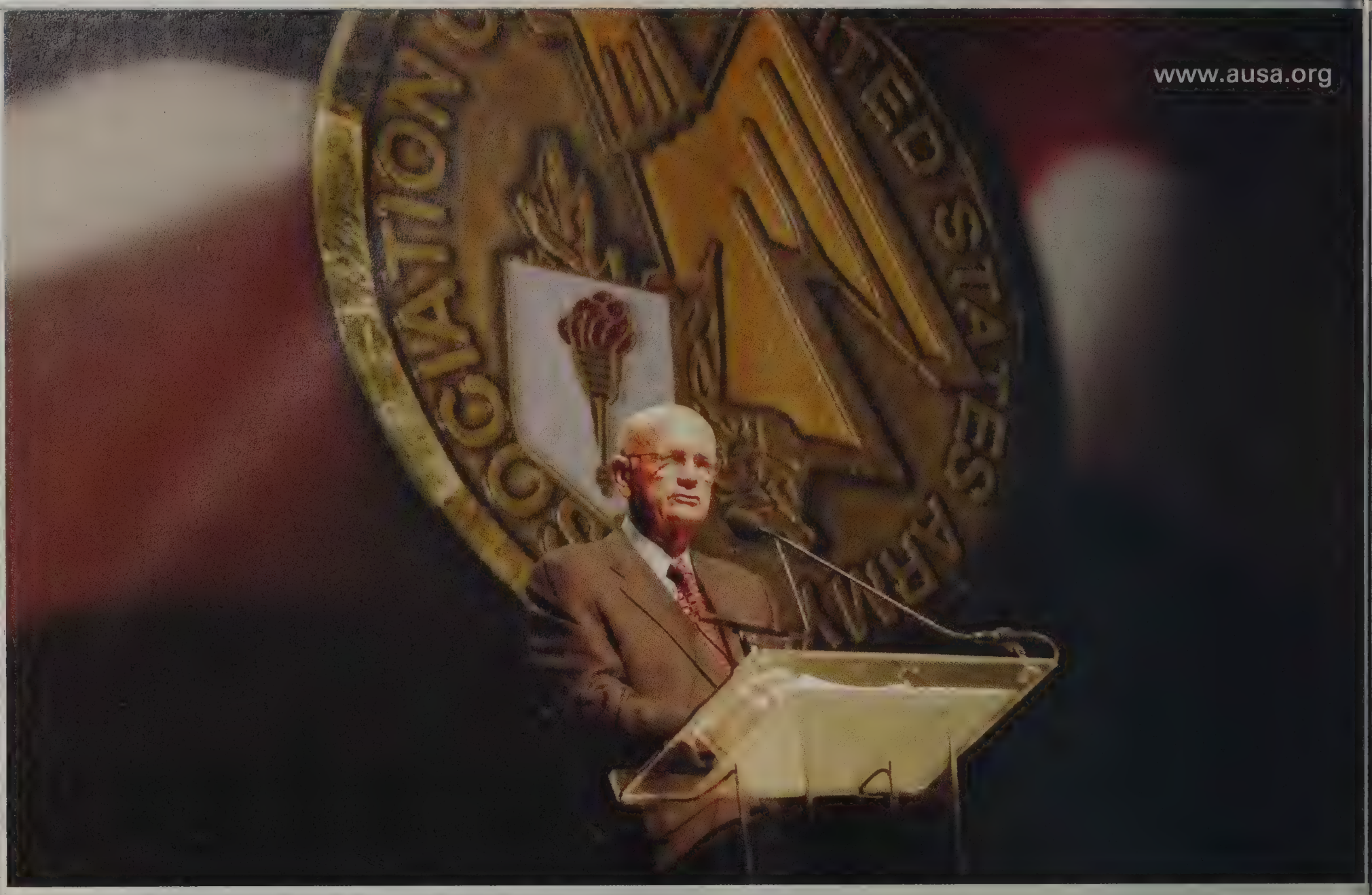
On February 12, Grant sent his two divisions hurtling through nasty winter weather along two dirt roads across

---

*BG **John S. Brown**, USA Ret., was chief of military history at the U.S. Army Center of Military History from December 1998 to October 2005. He commanded the 2nd Battalion, 66th Armor, in Iraq and Kuwait during the Gulf War and returned to Kuwait as commander of the 2nd Brigade, 1st Cavalry Division, in 1995. He has a doctorate in history from Indiana University. His book,* Kevlar Legions: A History of Army Transformation 1989–2005, *was recently published.*



Above, the Fort Henry guns were situated on the east side of the Tennessee River. Left, a Confederate monument on the battlefield was dedicated in 1933. Below, a cannon's placement represents a Confederate position protecting the land approach.



Over 650 of the world's leading defense companies are members of the AUSA Sustaining Membership Program. Is yours?

The Association of the United States Army's (AUSA) Sustaining Membership Program is your vital link to Army decision-makers at the highest levels. As the Army's professional organization, AUSA has played a role in strengthening national security for over 60 years by facilitating partnerships between military decision-makers and industry leaders.

When you join AUSA's Sustaining Membership Program, your company's executives will have the opportunity to share ideas with top Army officials at AUSA events. These events are conducted and attended by high level Army decision-makers, DoD officials and industry leaders – the individuals who are setting the agenda for the Army's future!

Join us today and discover what the AUSA Sustaining Membership Program can do for your business.

AUSA Sustaining Membership Program:
Supporting the Army–Industry Partnership

Association of the United States Army
2425 Wilson Boulevard • Arlington, VA 22201 • (703) 841-4300 ext. 389 • www.ausa.org

The Dover Hotel was used as a Confederate headquarters during the battle, and it was where Grant's unconditional surrender terms were accepted. The National Park Service has preserved it.

rugged hills and through marshes, streams and woods that led to Fort Donelson. Meanwhile, his gunboats and transports steamed down the Tennessee, picked up another division and steamed up the Cumberland, and landed on its banks. This division was well positioned to thwart and flank any effort to intercept Grant's approach through the difficult terrain separating the Tennessee and Cumberland Rivers. Put off by the weather, Confederates commanded by BG John B. Floyd made no such attempt. Instead they found themselves enveloped within the defenses of Fort Donelson.

Grant's force of approximately 25,000 soldiers now surrounded Floyd's roughly 15,000 in the most critical node along the lower Cumberland. Grant had not quite achieved full closure when Floyd attempted a breakout through terrain still thinly populated by Union troops. The attack succeeded in punching a hole through the Union lines, but in the face of confusion and counterattacks Floyd lost his nerve and ordered a withdrawal back into the original positions. Cavalry commander Nathan Bedford Forrest subsequently found his way out with his cavalry, and Floyd slipped across the river with perhaps 1,500 others. This left approximately 11,500 Confederate troops still inside when Grant's energetic counterattacks closed the trap again. The Confederate commander remaining at Fort Donelson, BG Simon Bolivar Buckner, sought terms. He was presented with Grant's now iconic demand for unconditional surrender, and did so. Punning on Grant's initials, irreverent soldiers took to calling him "Unconditional Surrender" Grant.

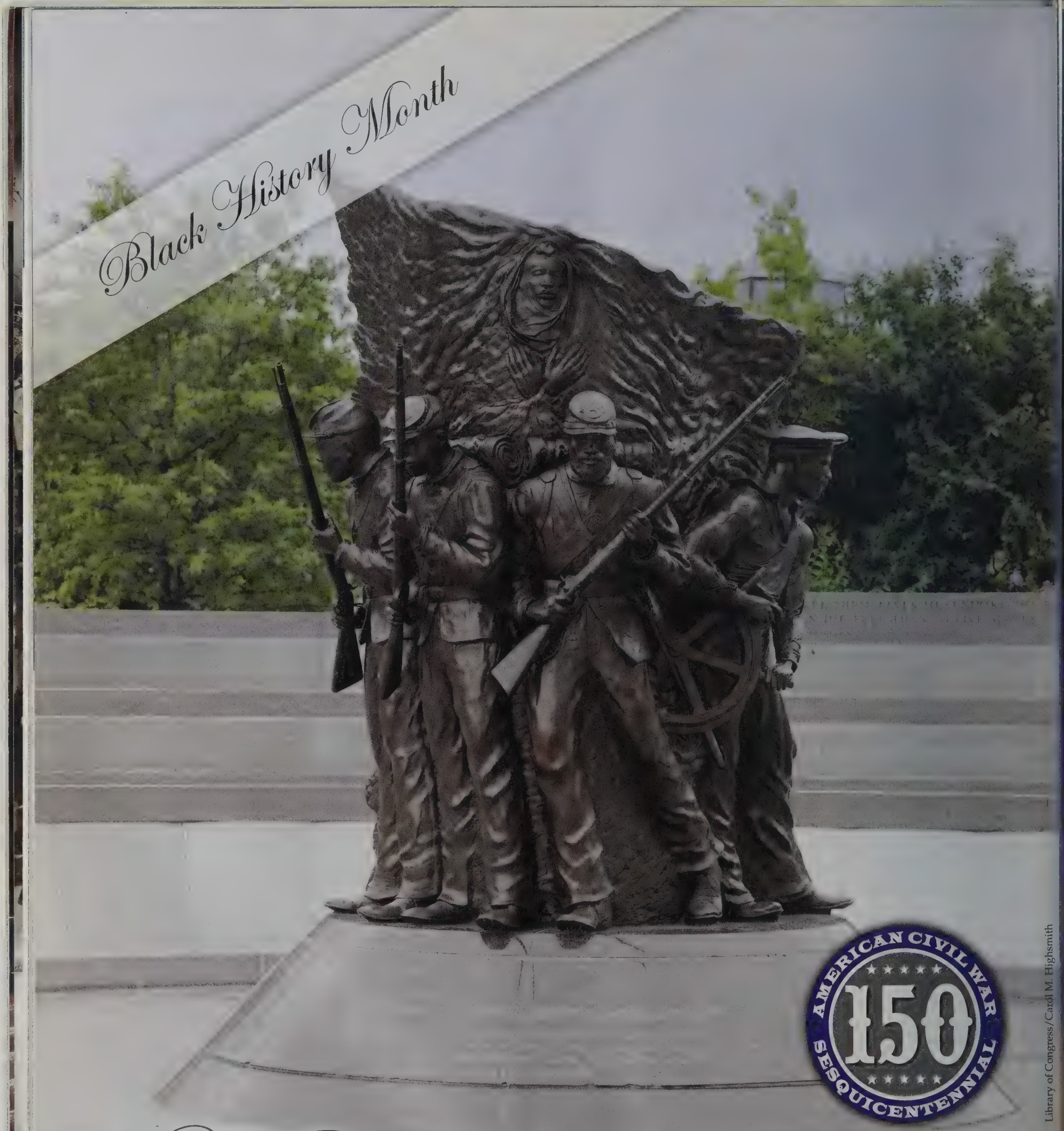
In about two weeks Ulysses Simpson Grant's bold stroke radically altered the strategic situation in the West. Confederate defenders, their cordon asunder, abandoned Kentucky and retreated 100 miles. The Confederacy was in effect split along the Tennessee River to the border of Mississippi. Confederate forces in eastern and western Tennessee fought separate battles. Mighty rivers had become highways regardless of the direction of their current, speeding armies along and supporting them in operational maneuvers. The same would be true of railroads. Operational and strategic plans, actually capable of defeating the Confederacy, were beginning to fall into place. Perhaps most important, the man capable of implementing them was making his presence felt. ★

Recommended Reading:

Esposito, Vincent J., *The West Point Atlas of American Wars, Volume I: 1689–1900* (New York: Frederick A. Praeger, 1959)

Foote, Shelby, *The Civil War: A Narrative: Fort Sumter to Perryville* (New York: Random House, 1958)

McPherson, James M., *Battle Cry of Freedom: The Civil War Era* (New York: Oxford University Press, 1988)



Library of Congress/Carol M. Highsmith

The African American Civil War Memorial in Washington, D.C., is the only national memorial to African American soldiers and sailors who served in the Civil War. "The Spirit of Freedom" sculpture is 10 feet tall and features black soldiers and a sailor in uniform. It is surrounded by a Wall of Honor that lists the 209,145 African Americans who served with the United States Colored Troops during the Civil War. The memorial is situated across the street from the African American Civil War Museum, which opened in July 2011.

IED protection that goes wherever you go.

The IED threat is always there. And with CREW Duke, so is your protection against it. Invented by SRC and manufactured by SRCTec, this is a tactically superior, state-of-the-art jamming system that gives you:

- Simple operation with minimal power requirements
- High reliability and optimal performance
- Most widely fielded CREW system
- Innovation worthy of the Army's Top 10 Greatest Inventions Award

So when you're in the field, your best protection is right there with you.

To find out more, visit **www.srcinc.com/CREWDuke.**

Visit us at
AUSA Winter
Outdoor Pavilion

CREW Duke

Redefining possible

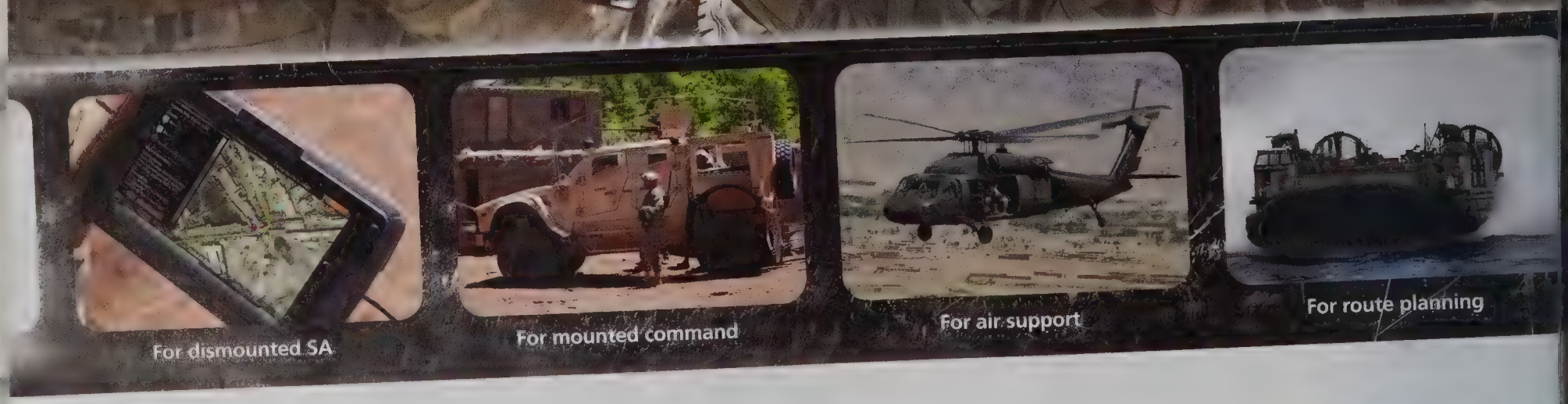
SRC

Defense › Environment › Intelligence

© 2012 SRC, Inc. All rights reserved.

Delivering the network.

The Harris AN/PRC-117G: *now shipping* with SRW.



The Harris AN/PRC-117G gives today's warfighters enhanced interoperability using the Soldier Radio Waveform, a JTRS standard for wideband tactical communications. Learn how Harris delivers the network at Harris.com/Delivers

HARRIS®
assuredcommunications®

harris.com

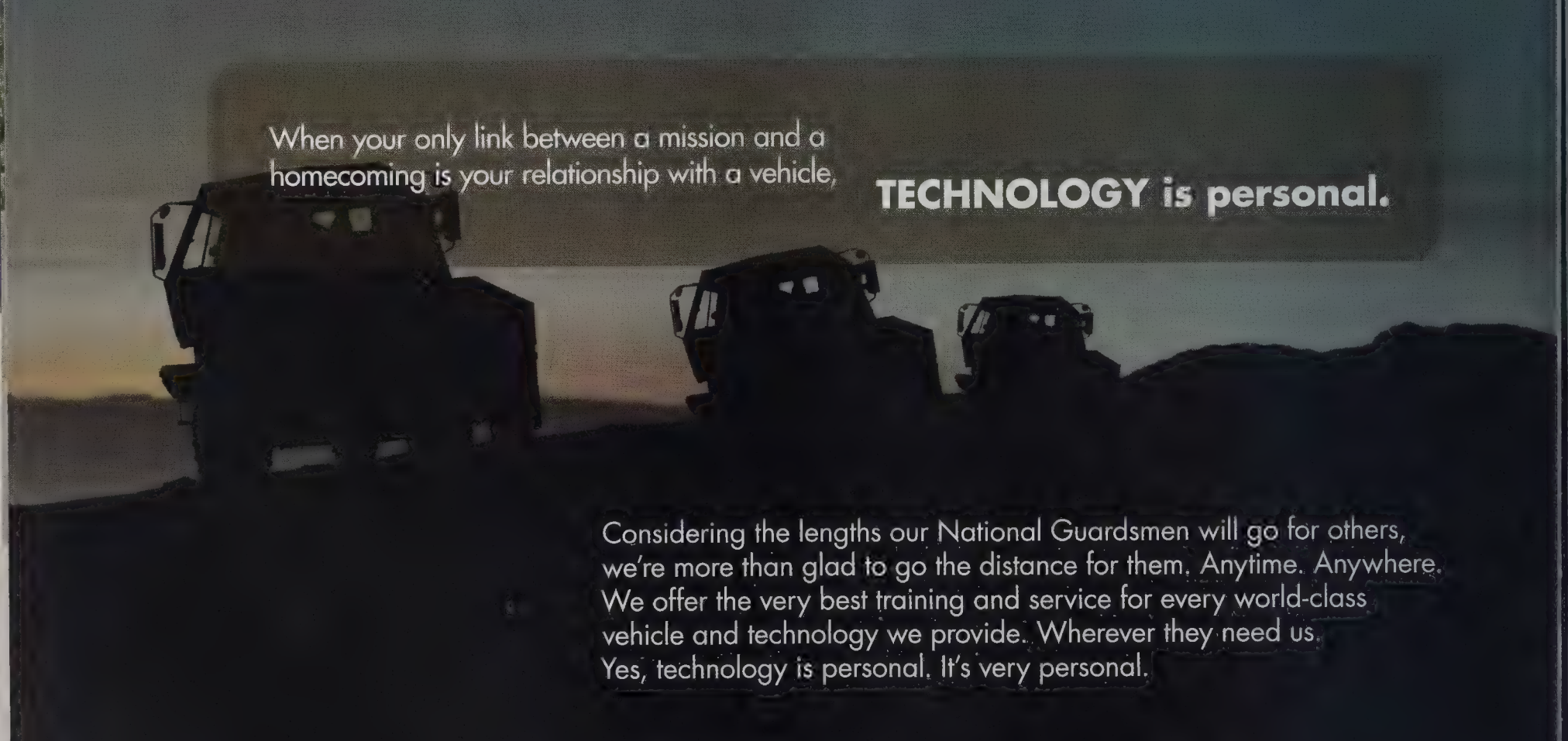
The Magazine of the Association of the United States Army

ARMY

March 2012 www.ausa.org $3.00

ucation Periodicals PERIODICAL
.05 UNC
2, no. 3 (2012) A

**********AUTO**3-DIGIT 618
116399 20120531 20120301
|||.....|||.|.||.....||.||.||.||.||.....|||.....|.||.||.....|
ACQUISITONS DEPT.C03335932 0001
ACQUISITONS DEPT.C03335932 001011
1408 W GREGORY DR P000008
URBANA IL 61801-3607 01:015463



OSHKOSH DEFENSE

Visit Oshkosh Defense at AUSA Winter – Booth 3324

oshkoshdefense.com

©2012 OSHKOSH CORPORATION Oshkosh and the Oshkosh logo are registered trademarks of Oshkosh Corporation, Oshkosh, WI, USA

TECH_002_2012-US-1

ARMY MAGAZINE

VOL. 62, NO. 3 | March 2012

PUBLISHED BY THE ASSOCIATION OF THE U.S. ARMY

FRONT & CENTER

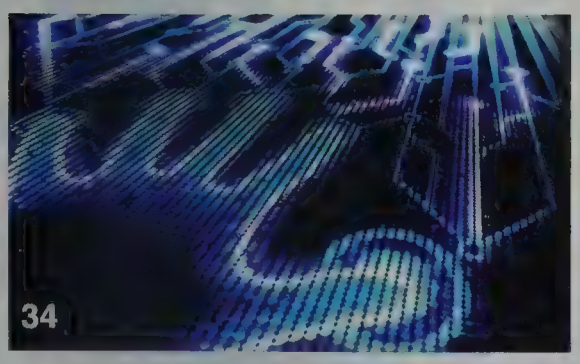
Army Strategy? *By GEN Frederick J. Kroesen, USA Ret.* ***Page 16***

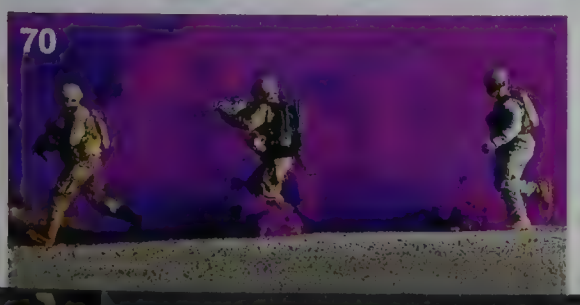
Drawing Down Smart: Managing the Army's Reduction *By Richard Hart Sinnreich* ***Page 17***

Improving Officer Evaluations *By CPT George J. Athanasopoulos* ***Page 18***

The Chief of Staff's Professional Reading List *By GEN Raymond T. Odierno* ***Page 22***

FEATURES





AMC: Paving the Way with a 21st-Century Construct and a 'Factory to Foxhole' Logistics Connection
An Interview by Dennis Steele
The commander of U.S. Army Materiel Command (AMC), GEN Ann E. Dunwoody, notes the logistical challenges of drawing down in Iraq while sustaining operations in Afghanistan and describes how AMC has evolved. ***Page 24***

Doctrine at the Speed of War: A 21st-Century Paradigm for Army Knowledge
By LTG David G. Perkins and CPT Nathan K. Finney
Doctrine 2015 is designed to transform the Army's doctrinal base and deliver lessons learned from a decade of war to the soldier on the ground quickly and concisely. ***Page 34***

Synchronized Fielding: From White Sands to the Sands of Afghanistan
By Scott R. Gourley
A seven-step modernization process culminates with the synchronized fielding of advanced combat capabilities to units in theater. ***Page 40***

Strategic Reset *By Dennis Steele*
A new strategic defense plan combined with budget decisions calling for personnel and other cuts will result in a leaner and more agile Army. ***Page 49***

Company Command Post Initiative *By Scott R. Gourley*
Portable company command posts, reviewed at the Network Integration Evaluation 12.1, give company commanders resources previously available only at battalion level and above. ***Page 60***

Army Paratroopers Train at JRTC
The 82nd Airborne Division's 1st Brigade Combat Team participated in a live-fire exercise at the Joint Readiness Training Center, Fort Polk, La., in January. ***Page 70***

Company Command—Building Battle-Ready Teams: Lessons from Task Force Duke in Afghanistan
Company commanders from Task Force Duke—3rd Brigade, 1st Infantry Division—share excerpts from a new book containing lessons learned from its counterinsurgency campaign in eastern Afghanistan last summer. ***Page 73***

DEPARTMENTS

Letters 3
Advertisers in This Issue 5
Washington Report 6
News Call 8
Soldier Armed 81
Sustaining Member Profile 84
Reviews 85
Historically Speaking 93

HAVE AN EDGE
ON THE EDGE.
DRS provides soldier systems that optimize sustainment, situational awareness, target acquisition, hand-held computing, communications and network services. All to help give warfighters an edge. No matter where they are.
Empowering The Warfighter. That's Go To.
DRS.com/edge
DRS
TECHNOLOGIES
A Finmeccanica Company

GEN Gordon R. Sullivan, USA Ret.
President, AUSA

LTG Theodore G. Stroup Jr., USA Ret.
Vice President, Education, AUSA

Mary Blake French — *Editor in Chief*
Paul W. Bartels — *Art Director*
Larry Moffi — *Managing Editor*
Dennis Steele — *Senior Staff Writer*
Toni Eugene — *Associate Editor*
Joseph L. Broderick — *Production Artist*
Jeremy Dow — *Assistant Editor*
Katharine Scott — *Assistant Editor*
Jocelyn Wascher — *Editorial Assistant*

Contributing Editors
GEN Frederick J. Kroesen, USA Ret.; LTG James M. Dubik, USA Ret.; and Scott R. Gourley

LTG Thomas G. Rhame, USA Ret.
Vice President, Finance and Administration, AUSA

James E. Burke — *Advertising Manager*
Meagan B. Bailey
Advertising Production Manager

Norman Campbell — *Fulfillment Director*
Valerie Holman — *Fulfillment Manager*

ARMY is a professional journal devoted to the advancement of the military arts and sciences and representing the interests of the U.S. Army. Copyright©2012, by the Association of the United States Army. ☐ **ARTICLES** appearing in ARMY do not necessarily reflect the opinion of the officers or members of the Council of Trustees of AUSA, or its editors. Articles are expressions of personal opinion and should not be interpreted as reflecting the official opinion of the Department of Defense nor of any branch, command, installation or agency of the Department of Defense. The magazine assumes no responsibility for any unsolicited material. ☐ **ADVERTISING**. Neither ARMY, nor its publisher, the Association of the United States Army, makes any representations, warranties or endorsements as to the truth and accuracy of the advertisements appearing herein, and no such representations, warranties or endorsements should be implied or inferred from the appearance of the advertisements in the publication. The advertisers are solely responsible for the contents of such advertisements. ☐ **RATES**. Individual memberships and subscriptions payable in advance (one year/three year): $21/$63 for E1-E4, cadets/OCS and GS1-GS4; $26/$71 for E5-E7, GS5-GS6; $31/$85 for E8-E9, O1-O3, W1-W3, GS7-GS11 and veterans; $34/$93 for O4-O6, W4-W5, GS12-GS15 and civilians; $39/$107 for O7-O10, SES and ES; life membership, graduated rates to $525 based on age; $17 a year of all dues is allocated for a subscription to ARMY Magazine; single copies, $3.00. Additional postage to all foreign countries, $15 per year. For other rates, write Fulfillment Manager, Box 101560, Arlington, VA 22210-0860.

ADVERTISING. Information and rates available from the Advertising Production Manager or our advertising representatives, who are:

The Audit Bureau

James E. Burke and **Irene Lamar**, 230 Park Ave., Suite 1546, New York, NY 10169. (212) 697-2844. FAX (212) 682-1421. E-mail: advdpt@aol.com.

ARMY (ISSN 0004-2455), published monthly. Vol. 62, No. 3. Subscription $34 a year. Publication offices: Association of the United States Army, 2425 Wilson Blvd., Arlington, VA 22201-3326, (703) 841-4300, FAX: (703) 841-3505, e-mail: armymag@ausa.org. Visit AUSA's web page on the Internet at www.ausa.org. Periodicals postage paid at Arlington, Va., and at additional mailing office.
POSTMASTER: Send address changes to ARMY Magazine, Box 101560, Arlington, VA 22210-0860.

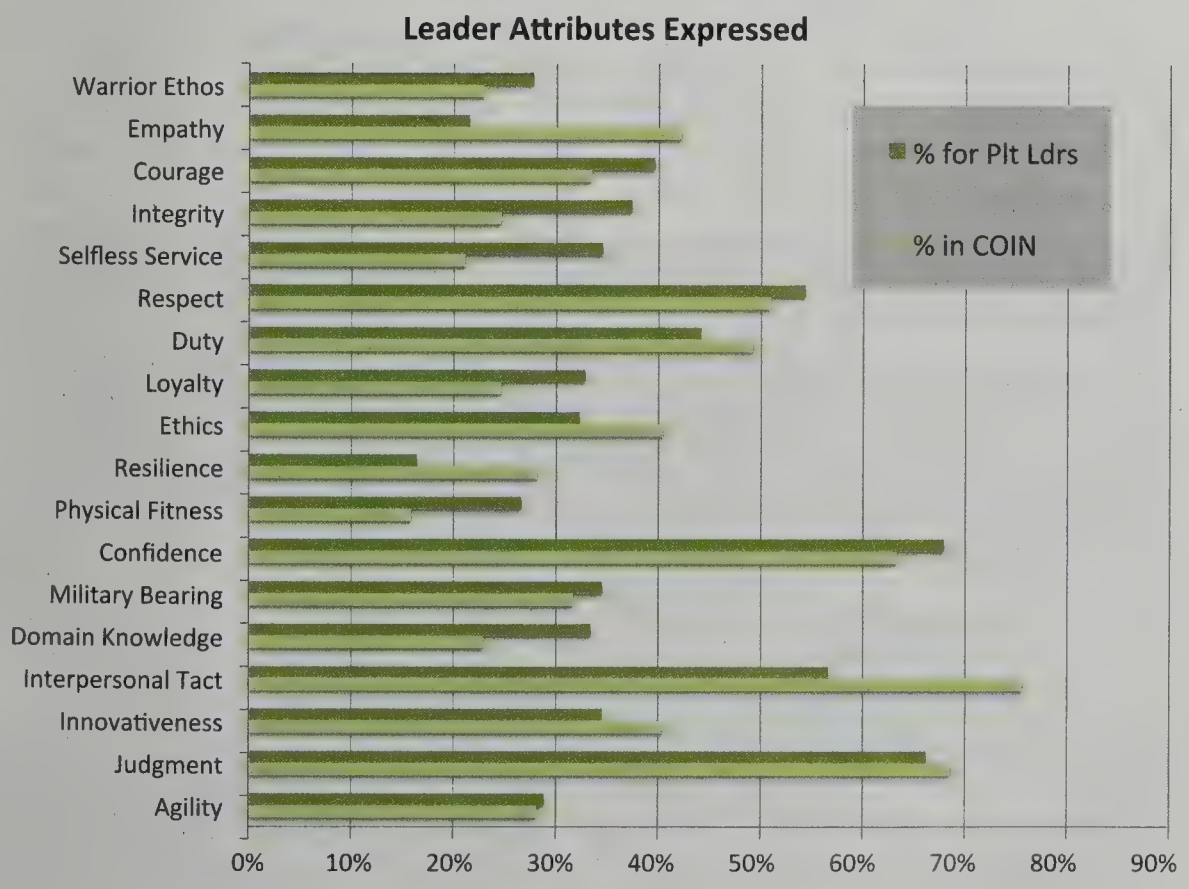
Letters

Relevant Leader Attributes

■ The "CompanyCommand" article in the January issue of ARMY, "The Five Most Relevant Leader Attributes," uses, as a basis, the 18 attributes that are listed in our leadership doctrine (Field Manual 6-22). The article does a good job of pointing out that there are differences between the degrees of importance of some attributes in counterinsurgency (COIN) and for platoon leaders in general. I particularly like how the contributors use their own words to translate the doctrinal terms (leader attributes) into advice for the next generation of platoon leaders.

I would suggest, however, combining the two bar charts from the third page of the article to allow for easier comparison. To assist in this process, the data provided was normalized by scaling to the percentage of total responses for each attribute (56 for COIN and 174 for platoon leaders). This really helps to show the similarities and differences in the leader attributes expressed for COIN as compared with those expressed for platoon leaders in the Maneuver Captains Career Course (MCCC).

As the article mentioned, the top five attributes—interpersonal tact, judgment, confidence, respect and duty—are the same for both environments, but the updated graph helps to highlight



This Month's Cover

GEN Ann E. Dunwoody, commanding general of the U.S. Army Materiel Command (AMC), photographed in the new AMC headquarters at Redstone Arsenal, Ala. In an interview with ARMY Magazine's senior staff writer Dennis Steele (page 24), GEN Dunwoody offers an overview of AMC's achievements and direction for the future.
(Cover Photograph by Dennis Steele)

light those that differ the most (in terms of rank order): empathy and resilience (both higher ranked in COIN, which makes sense) and selfless service and integrity (both lower ranked in COIN). I'm not sure if there is anything to be made of that or not, beyond the fact that for some attributes to be higher ranked, something else must be lower. Perhaps this is an area for additional research.

Bottom line: Please keep the great content coming in the "CompanyCommand" column, but it might be useful to consult an operations research analyst or data scientist (new name for statistician) when preparing visualizations of quantitative information.

LTC Scott Nestler
Monterey, Calif.

The editor responds:

■ I am thrilled to see that LTC Nestler conducted additional analysis on the published data to uncover more insights. His graph is illuminating and highlights how COIN operations create extra demands on leaders' empathy, resilience and interpersonal tact. Readers should keep in mind that the article's research methodology—which asked junior officers to share an actual, typical COIN experience and then to index their experiences in doctrinal terms—privileged COIN-specific attributes and doesn't tell the whole story. My wider research on leadership in Afghanistan, for instance, indicates that physical fitness is essential to overall mission accomplishment, as several commanders remark in this month's "CompanyCommand" article.

LTC Peter Kilner
West Point, N.Y.

'Read2Lead'

■ This retired old soldier was gratified to read, "Read2Lead: The Professional Reading List by and for Company-level Officers" in the February issue. Having read many of the top 50 books on the list, it is clear to me that the 151 company-grade officers who made the selections did a great job. I was commissioned in 1962 and was pleased to see that some of the books my peers and I cut our teeth on are still recommended: *Once an Eagle, Infantry Attacks, Street Without Joy, Company Commander: The Classic Infantry Memoir of World War II, The Soldier and the State: The Theory and Politics of Civil-Military Relations* and *This Kind of War: The Classic Korean War History.* I suspect that S.L.A. Marshall's two classics, *Men Against Fire: The Problem of Battle Command* and *The Armed Forces Officer* made the honorable mention list. Professional reading is a great way to get back to the basics of our profession.

COL Tom Fincher, USA Ret.
Chapin, S.C.

ARMY Magazine welcomes letters to the editor. Short letters are more likely to be published, and all letters may be edited for reasons of style, accuracy or space limitations. Letters should be exclusive to ARMY Magazine. All letters must include the writer's full name, address and daytime telephone number. The volume of letters we receive makes individual acknowledgment impossible. Please send letters to The Editor, ARMY Magazine, AUSA, 2425 Wilson Blvd., Arlington, VA 22201. Letters may also be faxed to (703) 841-3505 or sent via e-mail to armymag@ausa.org.

Veteran Support

■ An item in the December issue of ARMY reported that President Obama has signed into law two types of tax credits for companies hiring veterans.

That the government is putting its money where its mouth is in addressing the problem of persistent veteran underemployment is heartening. Such initiatives, however, would be more likely to succeed as part of a well-designed and sufficiently funded campaign to sell American employers on the practical advantages of hiring vets, an effort analogous to the marketing of Army opportunities to the nation's youth.

Such action is necessary because even sympathetic press coverage of the issue fosters the notion that veterans are risky hires by dwelling on such problems as military/civilian skill mismatches and the debilitating effects of PTSD (post-traumatic stress disorder). Those doing the hiring are handicapped in judging the matter because, as was not the case in an earlier time, few themselves have served.

This idea is not totally without precedent. In the early 1990s, recruiting advertising was tweaked in ways that supported soldiers leaving the service incident to the force drawdown after the first Gulf War. Helping them make the transition to the civilian labor force was correctly seen as falling within the purview of recruiting because doubts about the civilian marketability of military training and experience can only make a recruiter's job harder.

That Army veterans should experience greater-than-normal difficulties moving into the workforce is puzzling, since enlistment standards in place since the early 1980s ensure that recruits represent a comparatively well-educated slice of the youth population, they learn good work habits and they are manifestly trainable. Some shoulder great responsibilities at a young age. The issue needs to be studied, as it was in the 1980s, in order to identify the important barriers to employment and to design ways to overcome them.

The nation has a moral responsibility not to fail its military veterans, but there are also practical considerations. Although it may not seem to be the case when times are hard and new employment opportunities are scarce, demographic trends and worldwide competitive forces point to a continuing and growing need for capable workforce entrants. It is important to the nation that those who serve in our armed forces not be overlooked as a good way to meet that need.

Thomas W. Evans
Mundelein, Ill.

Back to Basics

■ I just got my February issue of ARMY and read the "Front & Center" article on back to basics by COL Chad B. McRee.

Having been an NCO in the late 1990s, I remember the pre-9/11 expectations for NCOs, especially coming in after the Clinton drawdown. My NCO mentors were spectacular, and those who were bottom feeders were quickly pushed out.

Our hands were our most powerful weapons as team leaders, and we inspected and rehearsed everything. If we can merge the best of pre-9/11 practices and the knowledge/experience gained post-9/11, then we will be achieving optimal performance in the force.

CPT HENRY CARTAGENA
Commander (Titan 6)
563rd Military Police Company
Fort Drum, N.Y.

'Curbing Acronymania'

■ I am a retired Army officer, but my late father-in-law was in the Navy. No disrespect to my fellow Vermonter Tom McKenna, but when I showed his letter in the December issue to my wife, she pointed out that COMCRUDESFLOTMED is not an acronym. Her father was once COMCRUDESPAC—Commander of Cruisers and Destroyers in the Pacific. The Navy uses these abbreviations to facilitate rapid signaling via Morse code, especially by flag and blinker light.

LAMBERT J. ASKE
Shelburne, Vt.

1-800-336-4570

That's the toll-free number to call AUSA national headquarters. The AUSA Action Line is open 8:30–5:00, Monday through Friday, except holidays. If you have a question about AUSA, give us a call.

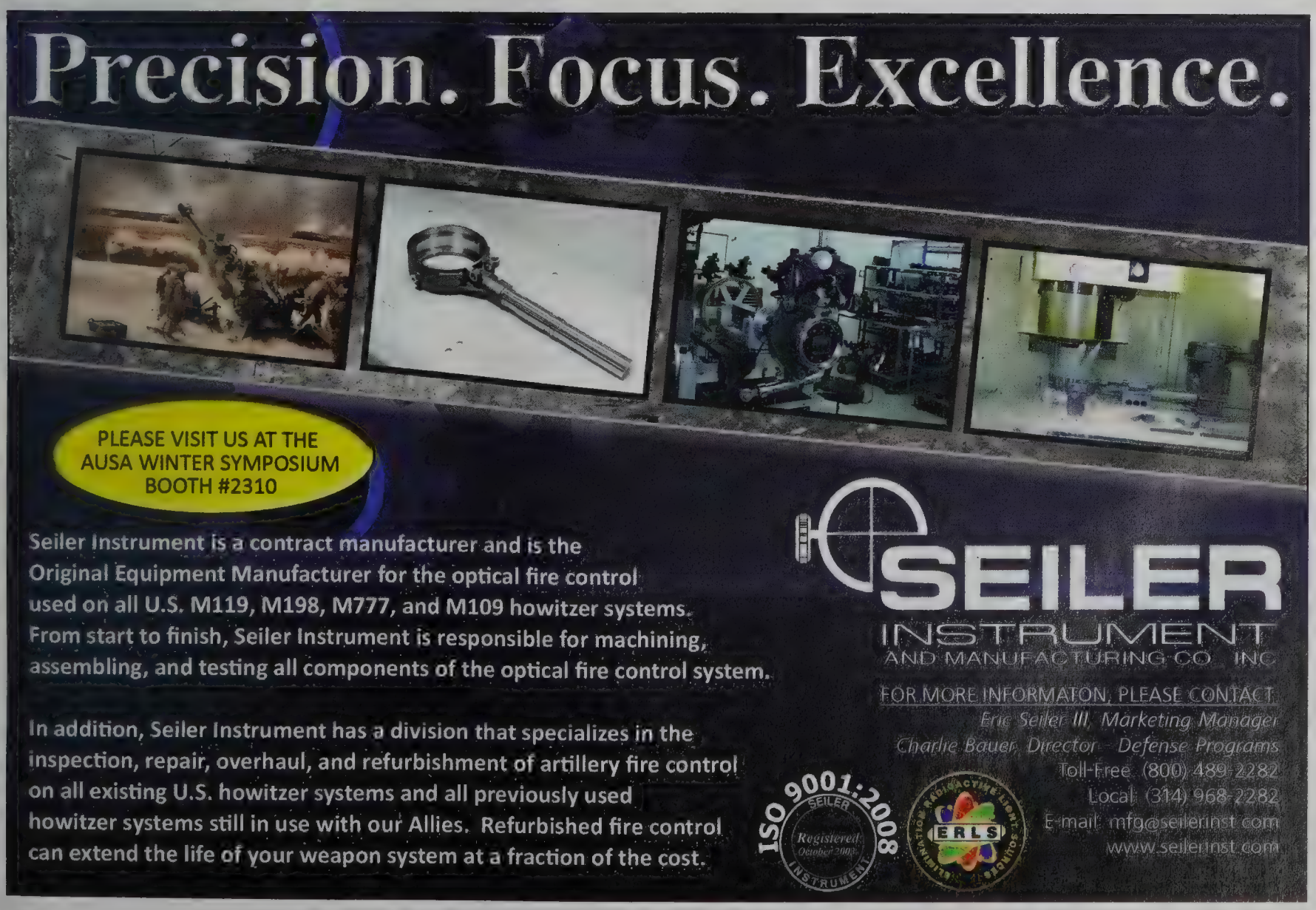
ADVERTISERS IN THIS ISSUE

ATK	7	NovAtel, Inc.	17
AUSA Membership	64	Oshkosh Defense	Cover II
Boeing BDS	37	Plasan	18
Caterpillar, Inc.	53	Poongsan Corporation	Cover III
Curtiss-Wright Controls Defense Solutions	31	QinetiQ North America	29
DRS Technologies, Inc.	2	RAM Mounts	59
Fluor Government Group	45	Seiler Instrument & Manufacturing Co., Inc.	5
General Atomics Aeronautical Systems Inc.	13	SRC, Inc	51
Harris RF	Cover IV	Streamlight, Inc.	43
iRobot Corporation	15	SureFire, LLC	27
Kongsberg Protech Systems	47	VT Miltope	11
L-3 Communications	55		
Lockheed Martin	67		
Meggitt Defense Systems, Inc.	57		
Meritor	9		
Navistar Defense	39		
Northrop Grumman Corp.	63		

ADVERTISING. Information and rates available from the Advertising Production Manager or our advertising representatives:

The Audit Bureau

James E. Burke and **Irene Lamar**, 230 Park Ave., Suite 646, New York, NY 10169. (212) 697-2844. FAX (212) 682-1421. E-mail: advdpt@aol.com.



Washington Report

Proposed DoD Budget Would Cut Army End Strength

Army end strength would be cut to 490,000 over the next five years, a loss of approximately 57,000 soldiers, according to Secretary of Defense Leon E. Panetta and Chairman of the Joint Chiefs of Staff GEN Martin E. Dempsey, who made the announcement at a Pentagon briefing in late January.

DoD's fiscal year (FY) 2013 budget request and defense plan through 2017 proposes a gradual reduction of at least eight of the Army's 45 combat brigades and suggests changes to personnel pay and retirement benefits. (See page 49.)

Following the briefing, Army Chief of Staff GEN Raymond T. Odierno explained that two brigade combat teams would be withdrawn from Europe and then disestablished. In addition, GEN Odierno told reporters he thinks DoD is going "to request … two more BRAC [base realignment and closure] rounds." He said, however, that he did not think a BRAC follow-on would have as great an impact on the Army as on other services. Some members of Congress, including chairmen of powerful committees, are adamantly opposed to new rounds of BRAC.

Secretary Panetta noted that personnel costs have grown by nearly 90 percent since 2001 and that the budget request addresses the costs of military pay, health care and retirement. It would allow for full pay raises that keep pace with raises in private-sector pay in FY 2013 and 2014. Beginning in 2015, however, DoD would provide more limited raises and would be less than those in the private sector. He said that DoD is "recommending increases in health care fees, co-pays and deductibles for retirees," which will be phased in over five years. In addition, DoD will ask Congress to establish a commission to conduct a comprehensive review of military retirement, but Secretary Panetta emphasized, "There will be, for those who serve today, no changes in retirement benefits."

Afghanistan Combat Mission Could End in 2013. En route to a meeting of NATO ministers in Brussels, Belgium, in early February, Secretary of Defense Leon E. Panetta told reporters that U.S. forces in Afghanistan could make the transition from combat operations to an advise-and-assist role by mid-2013. Such a goal, he said, is in line with the NATO strategy established in the 2010 summit in Lisbon, Portugal, and is based on the progress the International Security Assistance Force (ISAF) made in Afghanistan in 2011. In 2012, U.S. forces must consolidate those gains and continue the transfer of responsibility for security to Afghan forces.

Secretary Panetta said no decision has been made about troop numbers beyond the drawdown of the surge force by the end of 2012, but that "2013 is a critical year and therefore will demand that we have a strong presence" in Afghanistan in order to make the transition. It is basically what the United States did in Iraq, he said, and "it's what we're going to try to do in Afghanistan."

In other news concerning Operation Enduring Freedom, Army and DoD personnel testified in February before the House Armed Services Committee about the problem of attacks on U.S. and coalition forces by Afghan nationals—mostly Afghan National Security Forces—and noted that those attacks have increased. More than 45 insider attacks have occurred since 2007, with 75 percent occurring in the last two years. Although at least part of that increase can be attributed to more U.S. forces in Afghanistan, the attacks have prompted concerns about the relations between Afghan security forces and their coalition allies.

According to DoD data, most of the attacks are motivated by personal problems and are committed independently of insurgent groups, but insurgents impersonating or infiltrating Afghan security forces contribute to the problem. Although it is unlikely that this will be eliminated due to the necessity of collaboration between Afghan and U.S. forces, some measures can be taken to reduce it. According to BG Stephen Townsend, director of the Pakistan/Afghanistan Coordination Cell for the Joint Chiefs of Staff, DoD is strengthening the pre-employment vetting process in order to better screen Afghan nationals, and commanders can post their own guards and assign individuals to look out for unusual activity.

Philippine Dialogue. The State Department announced that the United States and the Philippines reaffirmed their commitment to an "invigorated and expanded alliance" during a two-day Bilateral Strategic Dialogue in late January in Washington, D.C. According to *The Philippine Star*, the talks focused on intensifying military cooperation with more joint training exercises that will include search and rescue, freedom of navigation, and countering terrorism and piracy. A joint ministerial meeting involving Secretary of State Hillary Rodham Clinton, Secretary of Defense Leon E. Panetta and Philippine officials is scheduled for March.

Hundreds of U.S. troops have been training and arming Filipino soldiers fighting Islamic extremists on the southern island of Mindanao since 2002. Those rotating forces serve in noncombat roles and are housed in Filipino camps. DoD has emphasized that it does not want to establish any permanent bases in the Philippines. Instead, the United States would deploy troops on a rotational basis only for joint training exercises in accordance with the Visiting Forces Agreement established in 1999.

Innovation ... Delivered.

SERVING OUR
NATION'S WARFIGHTER

Use of Department of Defense image does not constitute or imply endorsement.

From the factory to the foxhole, ATK is dedicated to assuring industrial readiness in support of our nation's Warfighters. Think facility management. Think ATK.

www.atk.com

ATK®

News Call

Two Army BCTs to Leave Europe

Secretary of Defense Leon Panetta announced in January that the Army will withdraw two of its brigade combat teams (BCTs) from Europe and replace them with rotational units. The reduction in end strength by about 10,000 would leave roughly 31,000 soldiers in Europe, the majority in Germany.

According to Army Chief of Staff GEN Raymond T. Odierno, the current plan is to have one brigade depart in 2013 and one in 2014.

The change is part of the new defense strategy announced earlier that calls for budget cuts and a leaner military. Secretary Panetta did not disclose a timeline or specify which of the four Europe-based brigades—170th Infantry Brigade Combat Team (IBCT), in Baumholder, Germany; the 172nd IBCT in Grafenwoehr, Germany; the 2nd Cavalry Regiment (Stryker) in Vilseck, Germany; or the 173rd Airborne BCT in Vicenza, Italy—would be withdrawn, nor did he say whether the units would be inactivated or return to the United States.

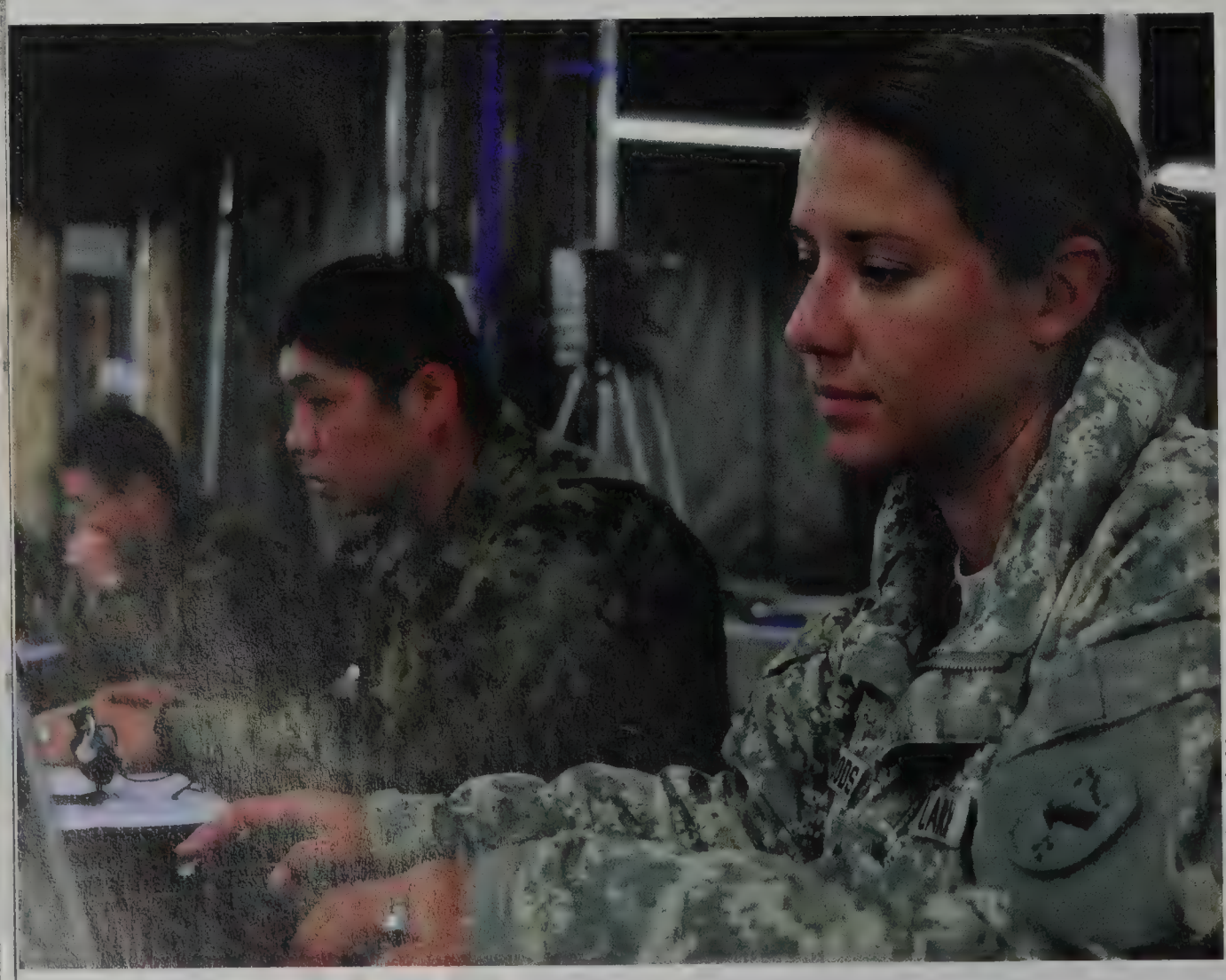
LTG Mark P. Hertling, commanding general of U.S. Army Europe, said the command has made recommendations regarding units and timing but that he could provide no specific information until the plans are formally approved. He said he is "optimistic about increasing those opportunities for forces to train and exercise with our allies." The downside of the change is that units will be in Europe for only short periods of time—anywhere from three weeks to two months.

Secretary Panetta emphasized, however, that the Army will retain a strong presence in Europe through the units rotated there for training or exercises. He noted that Europeans will actually see more American forces because the U.S. troops stationed in Europe have so often been deployed to Iraq or Afghanistan for the last decade.

Afghanistan Rotation. The Department of Defense has identified three major units to deploy as part of the upcoming rotation of forces operating in Afghanistan. The scheduled rotation of approximately 6,800 personnel—one division headquarters (HQ) and two brigade combat teams—will begin this spring.

- 3rd Infantry Division HQ, Fort Stewart, Ga.
- 1st Brigade Combat Team, 82nd Airborne Division, Fort Bragg, N.C. (to deploy as a partial BCT).
- 4th Brigade Combat Team, 82nd Airborne Division, Fort Bragg.

For information on the respective deployments contact 3rd Infantry Division HQ Public Affairs Office at 912-435-9876 or the 82nd Airborne Divi-



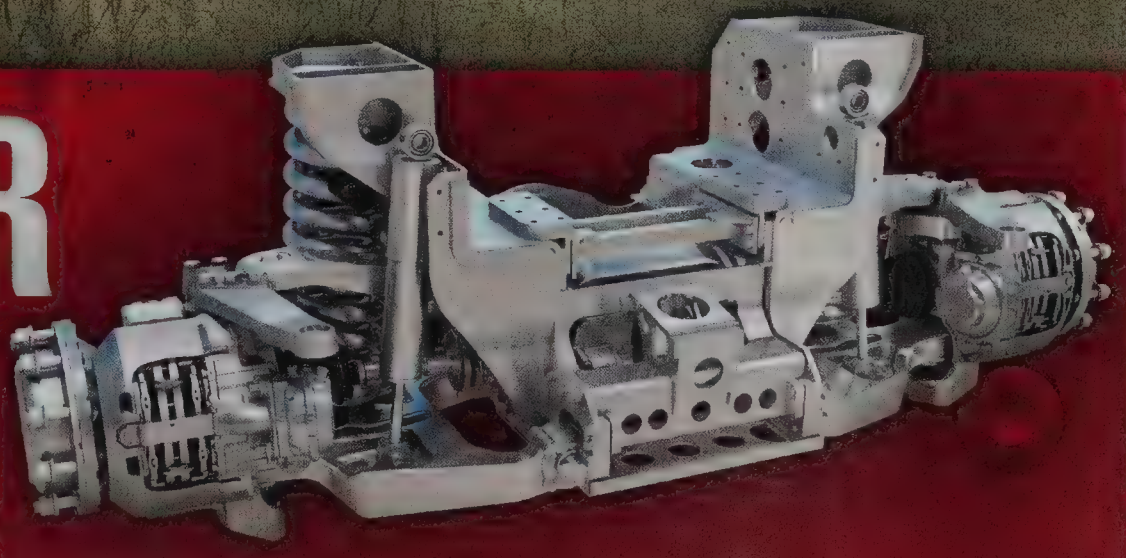
U.S. Army/SPC Brandy Mort

U.S.-Japanese Exercises. *CPT Brittany Woods, operations officer with the U.S. Army Pacific Contingency Command Post, worked side by side with Capt. Kousei Matunaga, exercise operations officer with the Exercise Plans and Operations Department in preparation for the Yama Sakura 61 exercise at Camp Itami in Osaka, Japan, in late January. Yama Sakura and another bilateral command post exercise with Japan, Keen Edge 12 in Yokota, reflect the growing strategic importance of the Asia-Pacific region as announced in the Obama administration's new defense strategy guidance. Both exercises were designed to increase interoperability of U.S. and Japanese forces as well as their readiness to defend against external threats. About 500 U.S. and 1,380 Japanese forces participated in Keen Edge 12, during which headquarters staffs used computer simulations to practice how they would handle a particular crisis or contingency. Nearly 800 U.S. troops and more than 3,500 Japanese forces took part in Yama Sakura, the largest bilateral exercise between the U.S. Army Pacific and Japanese ground forces since the earthquake and tsunami that devastated the east coast of Japan a year ago.*

SEE US AT AUSA WINTER AT BOOTH 2123

FEBRUARY 22-24, 2012 • FT. LAUDERDALE, FL

SUPERIOR MISSION SUPPORT



PROTEC™

THE PROTEC SERIES OF HIGH MOBILITY INDEPENDENT SUSPENSIONS (HMIS) for tactical wheeled military vehicles and armoured personnel carriers, as well as specialty and off-highway applications. Building a foundation of strength under every corner of the iron triangle — protection, performance and payload.

The ProTec Series 30 HMIS for applications requiring GAWRs up to 14,000 lbs., the ProTec Series 40 for GAWRs up to 22,000 lbs., and the ProTec Series 50 for GAWRs up to 29,000 lbs.

MERITOR | DEFENSE

meritordefense.com

sion Rear Detachment Public Affairs Office at 910-432-0661.

TRADOC Update. Speaking at the Association of the U.S. Army's Aviation Symposium in January, Commander of U.S. Army Training and Doctrine Command (TRADOC) GEN Robert W. Cone called for the Army to reverse gears after 10 years of war and return to a focus on full spectrum training. To meet wartime needs in Afghanistan and Iraq, the Army mobilized TRADOC soldiers and replaced them with contractors and civilians at its training centers, he said. The next war may be different, and although the Army now understands counterinsurgency, it "does not understand the high spectrum of operations."

"Training," said GEN Cone at a seminar earlier the same day, "must be realistic." He favors focusing on possible real-world scenarios and noted that a wide variety of virtual training is now available to units at home station. Nevertheless, he does not expect today's leaders to read all 500 manuals in the Army's inventory, pointing out that manuals will be trimmed and that more information will be available online.

GEN Cone made two additional suggestions at the seminar. He called for restoring brigades to three maneuver battalions rather than the two some now carry and said a recommendation to that effect is now before the Army Secretariat. He also called for restoring more engineers to brigade combat

GENERAL OFFICER CHANGES*

GEN D.L. Via from Dep. CG/CoS, AMC, Redstone Arsenal, Ala., to CG, AMC, Redstone Arsenal.

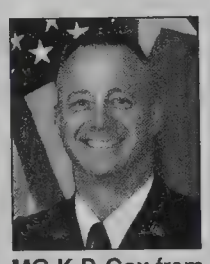
LTG D.B. Allyn from CG, 1st Cav. Div., Fort Hood, Texas/CG, CJTF-1, OEF, Afghanistan, to CG, XVIII Airborne Corps and Fort Bragg, Fort Bragg, N.C.

LTG P.E. McQuistion from CG, ASC, Rock Island, Ill., to Dep. CG/CoS, AMC, Redstone Arsenal.

LTG C.M. Scaparrotti from CG, I Corps and JB Lewis-McChord, Wash., and Cmdr., IJC/Dep. Cmdr., USF-A, OEF, to Dir., The Jt. Staff, Washington, D.C.

MG R.O. Baker from Vice Director, J-7, Jt. Staff, Washington, D.C., to Cmdr., CJTF-HOA, Djibouti.

MG P.C. Bayer Jr. from Dir. of Strategy, Plans and Policy, ODCS, G-3/5/7, USA, Washington, D.C., to Dep. CoS, Strategic Plans and Policy, HQ, SAC-T, Norfolk, Va.



MG K.P. Cox from CG, USACE, Transatlantic Div., Winchester, Va., to Dep. CG for Military and International Ops., USACE, Washington, D.C.

MG A.R. Ierardi from Dir. of Force Mgmt., ODCS, G-3/5/7, USA, Washington, D.C., to CG, 1st Cav. Div., Fort Hood, Texas.

MG J.O. Keenan from Cmdr., MEDDAC, Fort Carson/Chief, ANC, Fort Carson, Colo., to CG, USAPHC/Chief, ANC, APG, Md.

MG G.F. Martin from Cmdt., USAWC, Carlisle Barracks, Pa., to President, NDU, Washington, D.C.

MG J.W. Nicholson Jr. from Dep. CoS, Ops., ISAF, OEF, to Dep. Dir., JIEDDO, Arlington, Va.

MG T.T. Semonite from CG, USACE, South Atlantic Div., Atlanta, Ga., to Dep. Chief of Engineers/Dep. CG, USACE, Washington, D.C.

MG T.W. Spoehr from Dep. CG (Spt.), USF-I, OND, Iraq, to Dir., Program Analysis and Evaluation, G-8, USA, Washington, D.C.

Brigadier Generals: **(P) C.M. Nichols** from PEO Soldier, Fort Belvoir, Va., to CG, ACC, Redstone Arsenal, Ala.; **(P) J.J. Snow** from Dir., J-5, USF-I, OND, Iraq, to Dir. of Strategy, Plans and Policy, ODCS, G-3/5/7, USA, Washington, D.C.; **J.L. Bailey** from Dep. CG (Spt.), 4th ID (M), Fort Carson, Colo., to Dep. CoS, G-3/5/7, FORSCOM, Fort Bragg, N.C.; **J.N. Colt** from Dep. CG (Spt.), 101st Airborne Div. (AA), Fort Campbell, Ky., to Dep. CG, XVIII Airborne Corps and Fort Bragg, Fort Bragg; **H.J. Greene** from PEO IEW&S, APG, Md., to Dep. for Acquisition and Systems Mgmt., OASA (ALT); Washington, D.C; **M.E. Link,** USAR, from Dep. Surgeon, Clinical Ops., OCAR, to Asst. SG for Force Mgmt., Mobilization, Readiness and Reserve Affairs, OSG (IMA), Washington, D.C./Dep. Cmdr., AR-MEDCOM (TPU), Pinellas, Park, Fla.; **J.M. Murray** from Asst. Dep. Dir. for Jt. Training, J-7, Jt. Staff, Suffolk, Va., to Dir. of Force Mgmt., ODCS, G-3/5/7, USA, Washington, D.C.; **J.F. Pasquarette** from Dir. of CSF, ODCS, G-3/5/7, USA, Washington, D.C., to Dep. Dir., PA&E, ODCS, G-8, USA, Washington, D.C.

■ ***AA***—*Air Assault;* ***ACC***—*U.S. Army Contracting Cmd.;* ***AMC***—*U.S. Army Materiel Command;* ***ANC***—*U.S. Army Nurse Corps;* ***APG***—*Aberdeen Proving Ground;* ***AR-MEDCOM***—*Army Reserve Medical Cmd.;* ***ASC***—*U.S. Army Sustainment Cmd.;* ***Cmdt.***—*Commandant;* ***CoS***—*Chief of Staff;* ***CJTF-1***—*Combined Joint Task Force-1;* ***CJTF-HOA***—*Combined Joint Task Force-Horn of Africa;* ***CSF***—*Comprehensive Soldier Fitness;* ***FORSCOM***—*U.S. Army Forces Cmd.;* ***ID***—*Infantry Division;* ***IJC***—*International Security Assistance Force Joint Command;* ***IMA***—*Individual Mobilization Augmentee;* ***ISAF***—*International Security Assistance Force;* ***JB***—*Joint Base;* ***JIEDDO***—*Joint Improvised Explosive Device Defeat Organization;* ***MEDDAC***—*U.S. Army Medical Department Activity;* ***NDU***—*National Defense University;* ***OASA (ALT)***—*Office of the Assistant Secretary of the Army (Acquisition, Logistics and Technology);* ***OCAR***—*Office of the Chief, Army Reserve;* ***ODCS***—*Office of the Deputy Chief of Staff;* ***OEF***—*Operation Enduring Freedom;* ***OND***—*Operation New Dawn;* ***OSG***—*Office of the Surgeon General;* ***PA&E***—*Program Analysis and Evaluation;* ***PEO***—*Program Executive Office;* ***PEO IEW&S***—*Program Executive Officer, Intelligence, Electronic Warfare, and Sensors;* ***SAC-T***—*Supreme Allied Command-Transformation;* ***SG***—*Surgeon General;* ***Spt.***—*Support;* ***TPU***—*Troop Program Unit;* ***USACE***—*U.S. Army Corps of Engineers;* ***USAR***—*U.S. Army Reserve;* ***USAPHC***—*U.S. Army Public Health Cmd.;* ***USAWC***—*U.S. Army War College;* ***USF-A***—*U.S Forces-Afghanistan;* ***USF-I***—*U.S. Forces-Iraq.*

**Assignments to general officer slots announced by the General Officer Management Office, Department of the Army. Some officers are listed at the grade to which they are nominated, promotable or eligible to be frocked. The reporting dates for some officers may not yet be determined.*

Computers · Disk Drives · Mass Storage · Printers · Network Communication Devices · Product Support for Military & Commercial Applications

TOUGHEST KID ON THE FLIGHTLINE

A Case for Rugged... As a mobile clamshell or tablet, VT Miltope's new RCLC-1 rugged convertible laptop is mission-ready in any form. The RCLC-1 is an integral part of the MSD-V3 program developed for the U.S. Army's At-Platform Automatic Test Systems (APATS) Integrated Family of Test Equipment (IFTE). Our family of HARD WEAR sets the standard for rugged military computing. Built rugged down to their core processors, our products improve warfighters' ability to perform maintenance missions in extreme environments and challenging tactical conditions. The VT Miltope Family... mission-ready in the hangar, on the flightline, or on the move. MILTOPE.COM

Visit us at AUSA Winter, booth 1925

RUGGED RUNS IN THE FAMILY

VT Miltope

A company of VT Systems

teams because they will likely be needed in theaters with poorly established infrastructures.

USAREUR Writing Contest. ARMY Magazine authors took first and second place in U.S. Army Europe's first Professional Writing Competition in late January. COL Steve Maranian, commander; MAJ Eric Durham, chief of operations; and MAJ Nikolaus Guran, chief of plans, 19th Battlefield Coordination Detachment (BCD), Ramstein Air Base, Germany, won first place for their article, "The 'BCD' in Support of the Modern Theater," which appeared in the December 2011 issue of ARMY Magazine. The article uses Operation Odyssey Dawn in Libya to explain what a BCD is and how it contributes to today's fight. LTC Chris Budihas and MAJ Kevin Broadnax, Joint Multinational Training Command, Grafenwoehr, Germany, took second place for "The Army's Next Training Model: Building on the Past as We Prepare for the Future," which ran in the January 2012 issue of ARMY.

Third place was awarded to MG Jimmie Jaye Wells, former commander of USAREUR's 7th Civil Support Command, for an article published in the January-February 2011 edition of *The Officer* magazine.

USAREUR commanding general, LTG Mark Hertling, who sponsored the competition, reviewed articles and selected those "having the most positive effect on the U.S. Army or USAREUR." The names of the first-place team will be displayed on a bust of President Dwight D. Eisenhower in the USAREUR headquarters in Heidelberg, Germany.

To view all the articles submitted for the competition, visit the U.S. Army Europe Professional Writing web page at http://www.eur.army.mil/news/professional-writings.

MEDCOM Civilian Jobs. The Civilian Corps of the U.S. Army Medical Command (MEDCOM) announced in January it will participate in job fairs throughout the year to fill various positions at more than 70 military medical facilities across the United States, Europe and Asia. In March, MEDCOM Civilian Corps will be recruiting at fairs and conferences in South Carolina, Maryland, Texas, Nevada, Illinois, Georgia and Washington, D.C. In addition, it will be holding focus groups to assist in its efforts to hire wounded warriors and other individuals with disabilities.

For more information, visit www.civilianmedicaljobs.com; to learn about upcoming job fairs and focus groups, click on the events tab.

CAMO Contracts. Program Executive Office (PEO) Soldier announced in January that it has awarded contracts to five vendors to produce camouflage uniforms for field trials and evaluation in fiscal year 2012.

Each selectee submitted patterns with the same shapes in colors suitable for three environments—woodland, desert and "transitional." Each vendor also submitted a fourth coordinated pattern—or named one of its environmental patterns—that works with the others and for use on organizational clothing and individual equipment (OCIE). Many submitted the transitional pattern for the OCIE.

The contracts call for each vendor to provide enough fabric in the new patterns to produce 150 uniforms—50 in each of the three environmental designs. PEO Soldier will field test the 750 uniforms as well as perform computer simulations and plans to report the results and make a recommendation in October.

The five vendors were selected from an initial field of 20 after a rigorous technical evaluation of the fabrics and input from soldiers. Four are industry partners, and the fifth is the U.S. Army Natick Soldier Research, Development and Engineering Center in Natick, Mass.

Engineers Aid at Border. Soldiers of 84th Engineer Support Company, 6th Engineer Battalion (Combat) (Airborne), 2nd Engineer Brigade, based at Joint Base Elmendorf-Richardson, Alaska, parachuted in to Fort Huachuca, Ariz., in January to begin construction of a strip of road along the Mexican border to support the U.S. Border Patrol's Tucson Sector.

It is the first of a three-phase Joint Task Force North (JTF North) mission to construct nearly one mile of border road, lookout roadways and necessary road drainage systems during fiscal year 2012. Three miles west of the Mariposa Port of Entry at Nogales, Ariz., 40 Airborne engineers cut and

Army Casualties in Afghanistan

The following U.S. Army soldiers were reported killed in Operation Enduring Freedom from January 1 to January 31, 2012. All names have been released through the Department of Defense; families have been notified.

SPC Keith D. Benson, 27
SPC Pernell J. Herrera, 33
1LT David A. Johnson, 24
SPC Brian J. Leonhardt, 21
SSG Jonathan M. Metzger, 32
PFC Dustin P. Napier, 20
SPC Christopher A. Patterson, 20
PFC Michael W. Pyron, 30
SPC Robert J. Tauteris Jr., 44
PFC Neil I. Turner, 21
SFC Benjamin B. Wise, 34

COMMAND SERGEANTS MAJOR CHANGES*

CSM D.S. Davenport from 1st Armored Division, Fort Bliss, Texas, to USAREUR, Germany.

CSM M. Sanchez from 101st Sustainment Bde., Fort Campbell, Ky., to 21st TSC, Germany.

■ ***TSC**—Theater Sustainment Cmd; **USAREUR**—U.S. Army Europe.*

**Command sergeants major positions assigned to general officer commands.*

Combat Deployed

The U.S. Army's Gray Eagle unmanned aircraft are on the job and contributing to battlefield success, providing Soldiers with superior situational awareness for even greater combat effectiveness.

Gray Eagle airborne endurance, Lynx Multi-mode Radar, and streaming EO/IR video enable persistent surveillance, swift target identification, and time-sensitive precision strike. Fielded more than a year ahead of Army requirements, the latest aircraft variant is equipped with a heavy-fuel engine for simplified battlefield logistics, TCDL line-of-sight and Ku SATCOM communications, communications relay, auto takeoff and landing, and control from the Army's One System GCS. Gray Eagle can be armed to carry four Hellfire missiles.

A powerful combat multiplier, Gray Eagle is already earning its place as the most sophisticated, reliable, and capable aircraft in the U.S. Army's UAS inventory.

GENERAL ATOMICS
AERONAUTICAL

©2012 General Atomics Aeronautical Systems, Inc. www.ga-asi.com Leading The Situational Awareness Revolution

cleared the route, and incoming units will shape the road and build the drainage systems.

JTF North routinely deploys military units and assets to support the Border Patrol as part of continuing interagency operations. This mission benefited both entities: The engineers benefited from parachute landing practice and working in a different terrain, and the Border Patrol will be able to cover the area in 10 minutes rather than two hours.

Education Partnership. The Army National Guard (ARNG) and Arizona State University (ASU) began a unique sustainability education partnership in January with the signing of an initiative at the Army National Guard Readiness Center in Arlington, Va. The collaborative effort gives eligible active duty Army, ARNG and Army Reserve soldiers and civilians the opportunity to earn a graduate certificate in sustainability leadership.

Offered through ASU's School of Sustainability, the new program is tailored to help soldiers and civilians of the Army and ARNG further their education and fulfill the Army's sustainability goals. The program consists of five online, three-credit-hour courses on sustainability that cover its fundamentals, its tools and techniques, and its impact and importance in today's Army. Upon successful completion of the courses, students can apply the certificate toward a master's degree in sustainability.

For more information, visit http://sustainabilityonline.asu.edu.

Hero Dogs. In January, the American Humane Association announced the opening of nominations for its second annual Hero Dog Awards, with the winners to be announced in October 2012. Nominations are open through September in eight categories: military, service, therapy, law enforcement/arson, search and rescue, hearing, guides, and "emerging" hero dogs, which honors "ordinary pets that do extraordinary things." Visit www.herodogawards.org to nominate a hero or to read about the contestants. Each nomination must be accompanied by a short narrative description, photograph and other information.

Each category finalist will receive $5,000 to be donated to one of the American Humane Association's charity partners listed on the Hero Dog Awards Web site, including the U.S. War Dog Association, the Seeing Eye and the Sage Foundation for Dogs Who Serve. The owner of the winning American Hero Dog will be awarded an extra $10,000 for his or her selected charity.

Guard Aids Alaska. The Alaska National Guard helped the 2,200 residents of the fishing town of Cordova dig out from a series of snowstorms in January. The town, bordering Prince William Sound in the southeastern part of the state, had been hit with some 15 feet of snow before 57 Alaska National Guard troops arrived with shovels and supplies for "Operation Deep Dig."

Weeks of record snowfall had already led to the collapse of several buildings, and more snow and rain were forecast when the National Guard responded to a resource request from the state emergency operation center. There is no highway to Cordova, which is accessible only by air and water. The airport was closed, so the Alaska National Guard troops

U.S. Army/SPC Cody Barber

Sniper Team. *U.S. Army CPL William Hopkins, foreground, assigned to the 2nd Aviation Assault Battalion, 82nd Combat Aviation Brigade (CAB), looks through the scope of a Barrett .50-caliber rifle while SGT Lucas Cordes, a sniper team leader assigned to the 82nd CAB, observes during an aerial firing platform exercise aboard a UH-60 Black Hawk helicopter in Logar Province, Afghanistan, in late January.*

U.S. Army/SSG Matthew Graham

Simulated Training. *U.S. soldiers with India Company, 2nd Battalion, 506th Infantry Regiment, 4th Brigade Combat Team, 101st Airborne Division, aim their simulated rifles at the Engagement Skills Trainer 2000 facility at Fort Campbell, Ky. The simulated firing range helps units meet small-arms training needs.*

arrived via the state's ferry system.

Alaska Army National Guard CPT Chad Ausel, commander of the 761st Military Police Company, assigned his soldiers to work in squads to clear areas identified by city officials. The soldiers concentrated on digging out city buildings, such as the library and high school, where snow was roughly six feet deep on roofs. National Guard personnel spent more than a week in Cordova helping the citizens dig out. ★

Front & Center

Army Strategy?

By GEN Frederick J. Kroesen
U.S. Army retired

Accepting the Nobel Peace Prize in 1953, GEN George C. Marshall called attention to "the rapid disintegration between 1945 and 1950 of our once vast power." He went on to state, "As a direct consequence … there resulted the brutal invasion of South Korea, which … threatened the complete defeat of our hastily arranged forces. … I speak of this with deep feeling because in 1939 and again in … 1950 it suddenly became my duty, my responsibility, to rebuild our national military strength in the very face of the gravest emergencies." GEN Marshall's task was principally to rebuild an Army that was too small.

The announcement of our new National Defense Strategy, a derivative of our national budget strategy, is another iteration of the siren song that firepower and technology will solve our future military needs. The newly pronounced and the now-endorsed AirSea Battle promises are a modern version of concepts that plagued our defense posture for most of the past century and that have been found wanting in almost every military fracas that we engaged in during that time. Even the new wrinkle about returning to our time-honored reliance on a volunteer militia is only a slight modification of the Quadrennial Defense Review, which expressed confidence that our allies would provide the landpower, if and when any was needed, in the pursuit of our objectives. Training those allies would be the principal function of our Army, and they would replace all but a few special operations capabilities that could be needed for "surgical" operations against high-value targets. Only in an unlikely major war would we need to mobilize our reserve forces, now being referred to as the militia. That they are never fully trained and ready for deployment is not a consideration of such strategy.

After World War I, GEN Billy Mitchell, Marshal Hugh Trenchard and Gen. Giulio Douhet promised that strategic bombing would win the next wars. Presidents Truman and Eisenhower substituted the atomic bomb and made the same promise. The wars we fought, however—World War II, Korea, Vietnam, Panama, the Gulf War, Iraq, Afghanistan and even the Grenada, Haiti and Bosnia confrontations—were all contested primarily on the ground and concluded over the locations and controls established by the land forces. Except for World War II, our enemies confronted us mostly with armies and/or irregular forces that had no air, naval or missile power of their own. None succumbed to the overwhelming might of our air and naval power except the Serbs, who soon realized they had nothing to lose by surrendering in order to halt our bombing campaign.

The die is cast and terms announced, however, and our Army leaders have confidently expressed a determination to maintain a powerful, agile, professional force capable of winning against any landpower adversary. They next must answer "To do what?" by defining the role of landpower in the air-sea strategy and the structure of the Army to satisfy it. The balance of armor, infantry, artillery, aviation and special operations has to be recalculated, and the support requirements have to be identified. The possibility that air-sea power may not be enough must not be overlooked.

Those tasks can become more manageable with some help from on high —reducing mission requirements that have had 180,000 soldiers serving in more than 80 countries around the world, some accompanied by their families but most on "hardship" tours. Replacing two brigades now stationed in Europe with two rotating semiannually from the continental United States does not reduce structure requirements, but it does increase the operations tempo that has been disrupting and degrading the family lives of soldiers for the past decade.

Getting rid of the nondeployables would greatly assist personnel management capabilities. Wounded warriors who wish to return to service, soldiers who are HIV positive, pregnant women and others temporarily unavailable make up a significant nondeployable cohort and are a major factor causing hollowness in the structure. During the past decade that cohort grew to about 70,000, roughly equaling the additional end strength authorized for the wars. Congressional action to authorize some kind of limbo status in which such personnel do not count against the end-strength limits unless and until they return to duty would alleviate this problem.

Another requirement is a determination of the long-term role of contracting for services that the Army cannot provide for itself. Sutlers and entrepreneurs serving soldiers are part of the history of Army support services, but contract personnel in Iraq and Afghanistan grew, unplanned, to a strength equaling or exceeding the number of soldiers in those theaters. Recognition of such needs as part of any military commitment can certainly improve the efficiency and effectiveness of such practice and contribute markedly to future war planning.

Restoring the Army educational system has been the subject of previous discussion in this column and will be a prime requirement for guaranteeing the future qualifications of the leadership core.

These are a sampling of problems, principally about manpower, facing the Army. Equally dire is the condition of maintenance, repair and acquisition of equipment that has been in hard use for the past decade and the reconstitution of a research and devel-

opment program that has been only weakly supported for too many years.

The 2013 budget, if news reports are valid, will provide the initial steps for coping with the sequestration demands of the current law, but pressing the most drastic actions further into the out-years does not alleviate the need for progress on all of these issues if the promise of a world-class Army is to be fulfilled. □

__GEN Frederick J. Kroesen__, USA Ret., formerly served as Vice Chief of Staff of the U.S. Army and commander in chief of U.S. Army Europe. He is a senior fellow of AUSA's Institute of Land Warfare.

Drawing Down Smart: Managing the Army's Reduction

By Richard Hart Sinnreich

Early in 1989, with a new President in office and evidence mounting of the Soviet Union's impending implosion, the Army's Chief of Staff, then halfway through his four-year tenure, assembled a group of colonels from around the Army to conduct a special project. The Army would be downsizing, he told them. "I need to know how to do it in a smart way."

In fact, Army staffers already had begun to examine that question. Building on their work, the chief's ad hoc committee proposed three fundamental principles by which to guide the expected drawdown.

First, a post-Cold War Army might be smaller, but it also should be better: strategically more agile, operationally more versatile and tactically more lethal. There should be no "hollowing out" of the Army as had happened after the Vietnam War. A smaller Army might be less able than its predecessor to sustain prolonged operations without augmentation, but its initial combat capability should remain unimpaired and if possible be enhanced.

Second, to compensate for that inevitable diminution in staying power, the drawdown should be designed with malice aforethought to permit rapid force expansion should the need arise for a larger or longer military commitment. That implied rethinking the active/reserve mix. And it implied retaining a surplus of equipment like armor, artillery and aviation that couldn't easily or rapidly be replaced. It also implied finding ways to retain and gainfully employ trained leaders who, like long-lead-time materiel, couldn't be reacquired on short notice once divested.

Finally, the drawdown should be managed in a way that kept faith with those who had served honorably and well. Personnel should be diminished by normal attrition and reduced accession. There should be no mass purges of officers and NCOs of the sort that had previously happened after every war. And, once again, talent critical to expansibility should be retained.

That episode and its aftermath, which included the first Gulf War only two years later, seems relevant once again with the recent promulgation of new defense guidance prescribing a similar slimming down of the nation's ground forces. The size of the reduction remains to be announced, but pundits have predicted decrements ranging from 50,000 to 100,000 troops.

As was true in the late 1980s, however, the scale of reduction may be less important in the end than the manner in which the Army conducts it and the shape of the residual force that results. Although the threats for which it must remain prepared may have altered somewhat in the intervening years, the core principles that guided that earlier Army drawdown may be equally applicable today.

Indeed, there's evidence that the Army and the joint force overall are already thinking in those terms. Joint Chief of Staff Chairman GEN Martin E. Dempsey, himself briefly the Army's chief of staff, has made it clear that expansibility was a condition of the senior military leadership's approval of the new strategic guidance. And both political and military leaders have insisted that force reductions won't come at the expense of continued support of troops and their families.

There remain the questions: For what sort of post-reduction combat force should the Army aim and how should achieving it be managed? Here too, a few basic guidelines suggest themselves.

First, a versatile post-drawdown Army argues against accepting excessively limiting presumptions about the sort of fights to which it might one day be committed. Recent regular-versus-irregular warfare debates ultimately are sterile. Like most past conflicts, future wars almost certainly will witness both.

That acknowledged, the U.S. Army's warfighting preeminence resides above all in its unexcelled skill at combined arms operations. That argues against entirely divesting it of any capability—organizational or materiel—essential to conducting high-intensity combat against a competent, technologically mature opponent.

Second, if the Army is to be expansible, it must retain a surplus of those capabilities that would be the hardest and take the longest to reacquire if not already in hand. The days when U.S. industry could turn on a dime from building sedans to building main battle tanks are long since over. Ditto for the tactical competence and organizational leadership developed only through education, training and experience.

Finally, to keep faith with and assure productive and rewarding employment for officers and NCOs, to whom a smaller force necessarily will offer fewer field service opportunities, it's past time to rebuild a generating force largely gutted by the past decade's need to satisfy overseas deployments.

That means refurbishing the Army's schools, labs and combat training centers. It means furnishing new opportunities for civilian schooling and other talent-enriching assignments. And it means convincing a skeptical Congress that, in an expansible force, top-heavy is not automatically commensurate with wasteful.

The Army can't avoid reduction. As it did before, however, it can reduce in a smart way, and should. □

__Richard Hart Sinnreich__ writes regularly for The Lawton *(Okla.)* Sunday Constitution. *This article originally appeared in the January 15, 2012,* Lawton Constitution *and is reprinted by permission of the author.*

Improving Officer Evaluations

By CPT George J. Athanasopoulos

What has the Army learned after a decade of war, and how is it using that knowledge to better the institution? In reference to the process of evaluating officers, the answer is perhaps disappointing. After 10 years the Army is returning to its institutionally preferred steady state, not having incorporated the lessons learned on how to evaluate leadership and conduct a true audit of performance. As an officer corps, we must demand better.

When the initial hostilities in Iraq and Afghanistan ended, the Army was confronted by a type of war it was not prepared to fight. We cannot let the passage of time or the convenient revision of facts mislead us from the painful truth: We were losing that war. If not for the voices of a few outliers who provided the intellectual muscle to allow for a change in strategy, we would have lost the war in Iraq. The war in Afghanistan is still undecided, but it is being fought in ways not envisioned when it began. It is unreasonable to think that the Army as a whole brought about this change in strategy or that it was by unanimous consent. It also seems impossible to think that as an institution we would ignore the changes in leadership philosophy that have led us to success: powering down,

flattening the network and critical decision making at every level.

To revert to a hierarchical model that could bring us to the verge of failure is at the very least unwise.

In addressing only the most recent symptoms of a toxic leadership epidemic, the Army recently relieved at least three brigade commanders based on their leadership failures. A leader does not emerge as "toxic" spontaneously and without warning after decades of service. It stands to reason that there had been ample warning, and either it had been ignored by superiors or the process to evaluate, promote and assign to leadership positions had been unable to prevent it. To assert, as COL Denise F. Williams does in her study, "Toxic Leadership in the U.S. Army," that toxic leadership simply "reflects an aspect of human nature" or that this style of leadership is "the inherent paradoxical nature of military leadership" is to forgive the Army for its role in the entire process, as if the organization were an innocent bystander. A 2006 study by the Rand Corporation's Arroyo Center titled "Something Old, Something New: Army Leader Development in a Dynamic Environment" states that "considerably more needs to be done to develop leaders who are well prepared to meet the challenges of the contemporary environment and to continually learn and adapt to new circumstances." COL Williams takes this argument one step further to assert that "inadequate development is another cause of toxic leadership."

The idea that inadequate development is a root cause of toxic leadership is misleading. Development is simply an improvement process requiring time and attention. If inadequate development were a root cause, how does a military career consisting of numerous assignments, a civilian and professional military education, and countless opportunities for development still produce toxic leaders? The answer is that the problem is not a matter of development; it is the system that evaluates success and failure during that development.

COL Williams is spot on, however, when she says that toxic leaders continue to advance in the current structure because "their superiors are either oblivious to the toxic behavior or, more likely, are so satisfied with the results in terms of mission accomplishment that they choose to overlook the human cost of getting the job done." By this logic, either the system is unable to identify toxic leaders or it forgives them because their evaluation is based solely on the requirements of their immediate superiors. The only reason they are identified at all is that they rise to a position at which their leadership failings become so apparent that they cannot be ignored. The logical conclusion is that the current system is inadequate to prevent toxic leaders from succeeding, and one of the reasons is the narrow scope of who is responsible for conducting the audit of performance.

Army Directive 2011-16 (Changes to the Army Evaluation Reporting System) recently brought back the box check for company-grade officers and requires the officer evaluation report (OER) to state whether or not the

AUSA's Institute of Land Warfare invites you to

GIVE VOICE TO YOUR KNOWLEDGE

The Association of the United States Army's professional education program is designed to identify, discuss and influence the outcome of significant issues that affect the U.S. Army and national defense. AUSA's Institute of Land Warfare (ILW) accomplishes this goal through the sponsorship of writing programs, for which quality manuscripts are needed.

ILW would like to invite you—past and present servicemembers, Army civilians, friends of the Army and others with an interest in and knowledge of national defense—to submit a manuscript to one or more of our writing programs. Membership in AUSA, while always encouraged, is not a requirement for participation.

CALL *for* MANUSCRIPTS

For important information on the Institute of Land Warfare writing program, categories and submission guidelines, please visit http://www.ausa.org/publications/ilw/Pages/WritingProgram.aspx.

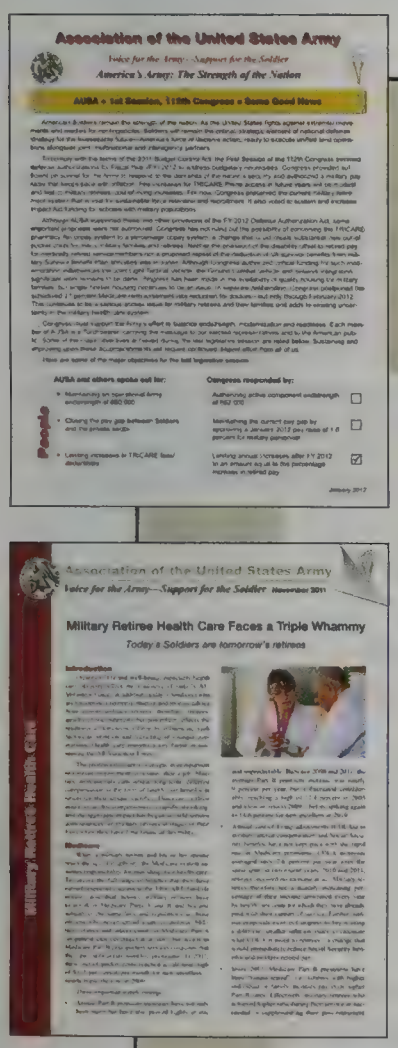
rated officer has completed or initiated an Army Multi-Source Assessment and Feedback (MSAF). Human Resources Command contends that deficiencies in the current officer evaluation process exist only because of a lack of rater accountability and honest feedback. By bringing back the box check and adding the MSAF, these problems are seemingly solved.

In reality, nothing could be further from the truth. The Army has a leadership evaluation process that operates on a single axis between the rated officer and superior officers and is designed to develop leaders suited for a simple binary struggle between good and evil. This is in stark contrast to the current reality of a fragmented, increasingly complex and, unfortunately, very real operating environment.

The Army, in a subtle acknowledgement that the OER process does need to be changed, has stated that it is developing a successor to the current OER form and will release it during the summer. If the changes are not substantial, however, those efforts will have been wasted. The Army must act to rewrite the entire system, taking what it refers to now only as a useful tool in leadership development (MSAF) and creating an entirely new framework for evaluating officers. The Army needs to adopt an idea advanced by LTC Paul Yingling in his article "A Failure in Generalship" and implement a 360-degree evaluation for officers whereby they are evaluated not only by senior leaders but also by subordinates and peers.

In theory, a 360-degree evaluation is not a significant departure from current Army thought. A general officer's performance is evaluated by a general officer review board. Soldiers attending either Ranger School or Special Forces Assessment and Selection are graded by their peers and will not graduate if they fail. If this system is used for evaluating general officers and the most elite soldiers in the Army, it is certainly logical to assume that there must be a reason. A 360-degree evaluation would represent a tectonic cultural shift for the Army, however. Those resistant to the idea have long sought to explain away specific examples of toxic leadership as anomalies, thereby avoiding the difficult position of blaming a system that gave rise to their own personal success.

The current officer evaluation process uses a system whereby the rater and the senior rater assess the rated officer's performance and potential. The rater focuses primarily on performance, while the senior rater focuses primarily on potential. All too often, the senior rater relies on the rater for suggested comments or bases his or her comments on isolated performance measures and a handful of interactions he or she has had with the rated officer. Poor comments by a senior rater about an officer's potential will almost certainly handicap, if not doom, a career; yet these are not the people who know the rated officer best because they are not the ones who see the officer at his or her best and worst or day in and day out. It is perfectly reasonable to assume that the people who know the rated officer's leadership performance best would be his or her subordinates, as


Association of the United States Army
Voice for the Army—Support for the Soldier
America's Army: The Strength of the Nation

Association of the United States Army
Voice for the Army—Support for the Soldier November 2011
Military Retiree Health Care Faces a Triple Whammy
Today's Soldiers are tomorrow's retirees

Help AUSA continue to be the Voice for America's Army

The Institute of Land Warfare (ILW), the educational arm of AUSA, publishes papers and Torchbearers that educate the Administration, Congress and the general public on issues directly affecting America's Army and our Soldiers.

The printing of these papers costs money and ILW, as a non-profit, must depend on contributions. Help ILW continue to ensure that America has the strongest Army possible and that our Soldiers are taken care of.

For more information, please contact Millie Hurlbut at 703-907-2679 or mhurlbut@ausa.org.

THE INSTITUTE OF LAND WARFARE • AUSA •

they are the ones who are subject to it. Furthermore, a rated officer might be truly measured only by those equal in rank and responsibility who must depend on the rated officer to accomplish their mission or protect their flank.

The Army has recognized these facts but has only enabled a system—MSAF—by which a rated officer merely receives feedback to further development. This advisory approach will not fundamentally change the Army as it has no defined impact on an officer's career progression. If the Army wants to improve upon the type of leader that will emerge in the years to come, the only way to do so will be to change the system by which it selects and evaluates its prospective leaders. Anything less is simply delusional. The Army could reasonably create a method of evaluation that quantifies success and proportionally distributes the responsibility for evaluation to superiors, peers and subordinates. Evaluations would be made exclusively by officers who understand the roles and responsibilities inherent in the rated position. All of this could be done online and in a timely manner. (The Army has several similar programs already fully operational.) All this system would require for implementation is the institutional will to make it a reality. □

CPT George J. Athanasopoulos *commands the Wilsonville Recruiting Company, Portland Recruiting Battalion, Portland, Ore. He is an Airborne Ranger-qualified infantry officer who has deployed in support of Operations Iraqi Freedom and New Dawn four times and spent 18 months as an operations advisor to the Iraqi Army. A graduate of the University of Colorado at Boulder, he was commissioned through the Officer Candidate School at Fort Benning, Ga.*

The Chief of Staff's Professional Reading List

"This reading list is an important element in the professional development of all leaders in the Army. We can never spend too much time reading and thinking about the Army profession and its interaction with the world at large. These readings will deepen our understanding of the history of armies, the critical role of leadership in combat, and the strategic environment of today and the future. There is simply no better way to prepare for the future than a disciplined, focused commitment to a personal course of reading, study, thought and reflection. I challenge each of you to tackle these books and improve your power of critical thinking and understanding of the profession of arms."

—GEN Raymond T. Odierno

About the Program

The U.S. Army Chief of Staff's Professional Reading List is divided into four sublists: The Army Profession, The Force of Decisive Action, Broadening Leaders and The Strategic Environment. Taken together, these readings will help soldiers or Army civilians sharpen their critical faculties and broaden their understanding of the military art. These books also complement materials currently used in the Army educational system and can help bridge the intervals between periods of formal instruction at Army schools. It is imperative for members of the Army profession to be well-read in all aspects of our honorable and selfless calling.

Any professional reading list is, of course, only a brief introduction to the many books worth reading on Army history, heritage, leadership and world events. The list is just a starting point on a journey of discovery and development. This selection of books also does not imply that the Chief of Staff endorses the authors' views or interpretations. Nevertheless, these books contain thought-provoking ideas and information relevant to our dynamic Army today and into the future.

The Army Profession

Band of Brothers: E Company, 506th Regiment, 101st Airborne from Normandy to Hitler's Eagle's Nest. Stephen E. Ambrose.

Between War and Peace: How America Ends Its Wars. Matthew Moten, editor.

Boyd: The Fighter Pilot Who Changed the Art of War. Robert Coram.

Command Culture: Officer Education in the U.S. Army and the German Armed Forces, 1901–1940, and the Consequences for World War II. Jörg Muth.

Constitution of the United States. Available online at http://www.archives.gov/national-archives-experience/charters/constitution.html.

Dereliction of Duty: Lyndon Johnson, Robert McNamara, the Joint Chiefs of Staff, and the Lies that Led to Vietnam. H.R. McMaster.

Eisenhower: A Soldier's Life. Carlo D'Este.

The Face of Battle: A Study of Agincourt, Waterloo, and the Somme. John Keegan.

The Forgotten Hero of My Lai: The Hugh Thompson Story. Trent Angers.

Grey Eminence: Fox Conner and the Art of Mentorship. Edward Cox.

Grunts: Inside the American Infantry Combat Experience, World War II through Iraq. John C. McManus.

Lincoln and His Generals. Thomas Harry Williams.

A Message to Garcia. Fra Elbert Hubbard.

Nineteen Stars: A Study in Military Character and Leadership. Edgar F. Puryear, Jr.

Once an Eagle. Anton Myrer.

Partners in Command: George Marshall and Dwight Eisenhower in War and Peace. Mark Perry.

Personal Memoirs of Ulysses S. Grant. Ulysses S. Grant.

The Profession of Arms. General Sir John Hackett.

Supreme Command: Soldiers, Statesmen, and Leadership in Wartime. Eliot A. Cohen.

The Unforgiving Minute: A Soldier's Education. Craig M. Mullaney.

The Force of Decisive Action

1776. David G. McCullough.

The AEF Way of War: The American Army and Combat in World War I. Mark E. Grotelueschen.

American Military History, Volume II: The United States Army in a Global Era, 1917–2008. Richard W. Stewart, general editor.

An Army at Dawn: The War in North Africa, 1942–1943, Volume One of the Liberation Trilogy. Rick Atkinson.

Battle Cry of Freedom: The Civil War Era. James M. McPherson.

A Bright Shining Lie: John Paul Vann and America in Vietnam. Neil Sheehan.

The Cambridge Illustrated History of Warfare. Geoffrey Parker, editor.

East of Chosin: Entrapment and Breakout in Korea, 1950. Roy E. Appleman.

Intelligence in War: Knowledge of the Enemy from Napoleon to Al-Qaeda. John Keegan.

The Killer Angels: A Novel of the Civil War. Michael Shaara.

The Landmark Thucydides: A Comprehensive Guide to the Peloponnesian War. Robert B. Strassler, editor.

On Killing: The Psychological Cost of Learning to Kill in War and Society. Dave Grossman.

A Stillness at Appomattox (Army of the Potomac, Vol. 3). Bruce Catton.

Summons of the Trumpet: U.S.-Vietnam in Perspective. Dave R. Palmer.

Supplying War: Logistics from Wallenstein to Patton. Martin L. Van Creveld.

This Kind of War: The Classic Korean War History. T. R. Fehrenbach.

Tip of the Spear: U.S. Army Small-Unit Action in Iraq, 2004–2007. Jon T. Hoffman, editor.

Transformation Under Fire: Revolutionizing How America Fights. Douglas A. Macgregor.

The U.S. Military Intervention in Panama: Origins, Planning, and Crisis Management, June 1987–December 1989. Lawrence A. Yates.

We Were Soldiers Once … and Young: Ia Drang—the Battle That Changed the War in Vietnam. Harold G. Moore and Joseph L. Galloway.

Broadening Leaders

The Age of the Unthinkable: Why The New World Disorder Constantly Surprises Us and What We Can Do About It. Joshua Cooper Ramo.

Blowback, 2nd Edition: The Costs and Consequences of American Empire. Chalmers Johnson.

Cables from Kabul: The Inside Story of the West's Afghanistan Campaign. Sherard Cowper-Coles.

A Choice of Enemies: America Confronts the Middle East. Lawrence Freedman.

Credibility: How Leaders Gain and Lose It, Why People Demand It. James M. Kouzes and Barry Z. Posner.

Discourses on Livy. Niccolò Machiavelli.

The Devil You Don't Know: Going Back to Iraq. Zuhair al-Jezairy.

The Dynamics of Military Revolution, 1300–2050. MacGregor Knox and Williamson Murray, editors.

Flawed by Design: The Evolution of the CIA, JCS, and NSC. Amy Zegart.

For Whom the Bell Tolls. Ernest Hemingway.

How: Why How We Do Anything Means Everything. Dov Seidman.

The Instigators: How A Small Band of Activists Risked Their Lives and Helped Bring Down The Government of Egypt. David Wolman.

Leading Change. John P. Kotter.

Makers of Modern Strategy: From Machiavelli to the Nuclear Age. Peter Paret, Gordon A. Craig and Felix Gilbert, editors.

The Masks of War: American Military Styles in Strategy and Analysis. Carl H. Builder.

The Net Delusion: The Dark Side of Internet Freedom. Evgeny Morozov.

Rethinking the Principles of War. Anthony D. McIvor.

The Starfish and the Spider: The Unstoppable Power of Leaderless Organizations. Ori Brafman and Rod A. Beckstrom.

Switch: How to Change Things When Change Is Hard. Chip and Dan Heath.

Thinking in Time: The Uses of History for Decision-Makers. Richard E. Neustadt and Ernest R. May.

Wired for War: The Robotics Revolution and Conflict in the 21st Century. P.W. Singer.

The Strategic Environment

The Ascent of Money: A Financial History of the World. Niall Ferguson.

Boomerang: Travels in the New Third World. Michael Lewis.

The Clash of Civilizations and the Remaking of World Order. Samuel P. Huntington.

Descent into Chaos: The United States and the Failure of Nation Building in Pakistan, Afghanistan, and Central Asia. Ahmed Rashid.

The Forgotten Continent: The Battle for Latin America's Soul. Michael Reid.

The Grand Strategy of the Byzantine Empire. Edward N. Luttwak.

A History of Modern Iran. Ervand Abrahamian.

Kevlar Legions: A History of Army Transformation 1989–2005. John Sloan Brown.

Knowing the Enemy: Jihadist Ideology and the War on Terror. Mary Habeck.

The Longest War: The Iran-Iraq Military Conflict. Dilip Hiro.

Monsoon: The Indian Ocean and the Future of American Power. Robert D. Kaplan.

The Most Noble Adventure: The Marshall Plan and How America Helped Rebuild Europe. Greg Behrman.

My Life with the Taliban. Abdul Salam Zaeef.

On China. Henry A. Kissinger.

Prodigal Soldiers: How the Generation of Officers Born of Vietnam Revolutionized the American Style of War. James Kitfield.

The Quest: Energy, Security and the Remaking of the Modern World. Daniel Yergin.

That Used to Be Us: How America Fell Behind in the World It Invented and How We Can Come Back. Thomas Friedman and Michael Mandelbaum.

The Utility of Force: The Art of War in the Modern World. Rupert Smith.

The World is Flat: A Brief History of the Twenty-First Century. Thomas L. Friedman.

A World Restored: Metternich, Castlereagh and the Problems of Peace, 1812–1822. Henry A. Kissinger. □

AMC: Paving the Way with a
And a 'Factory to Foxhole'

The new U.S. Army Materiel Command (AMC) headquarters at Redstone Arsenal, Ala.: AMC began operations from the building last summer after relocating from Fort Belvoir, Va., under congressional base closing and realignment mandates that collocated AMC with several of its subordinate commands. Inset is a photograph of GEN Ann E. Dunwoody, the commanding general of AMC.

Dennis Steele

GEN Ann E. Dunwoody is the commanding general of the U.S. Army Materiel Command (AMC), headquartered at Redstone Arsenal, Ala., having taken command in November of 2008. She is the first woman in the U.S. military to attain four-star rank. At the start of Operation Enduring Freedom, GEN Dunwoody commanded the 1st Corps Support Command and deployed the logistics task force that supported the first deploying Army units in Afghanistan and stood up the Joint Logistics Command in Uzbekistan to support Combined Joint Task Force 180 in Afghanistan. Subsequently, at the start of Operation Iraqi Freedom, she commanded the Military Traffic Management Command (redesignated as the Surface Deployment and Distribution Command), and as its commander supported

21st-Century Construct Logistics Connection

U.S. Army Materiel Command

the largest Army wartime deployment/redeployment movement since World War II. She went on to command the Combined Arms Support Command and then serve as the U.S. Army's Deputy Chief of Staff for Logistics, G-4, before joining AMC as its deputy commanding general. For soldiers who have served in Iraq or Afghanistan, if they drove it, flew it, shot it, ate it, wore it, talked on it or used it to stop blood loss, AMC has played a major role in loading it, getting it to them, fueling it, fixing it or getting it back from the theaters of operations since 9/11. After serving 37 years in the Army, GEN Dunwoody plans to retire later this year. The current AMC deputy commanding general/chief of staff, LTG Dennis L. Via, has been nominated by the President to succeed her.

An Interview
By Dennis Steele
Senior Staff Writer

Q: AMC has played a large role in the drawdown of Operation New Dawn in Iraq and is playing a large role in sustaining Operation Enduring Freedom in Afghanistan. From your perspective, provide an update.

GEN Dunwoody: As I watched GEN Austin and Deputy Secretary of Defense Carter furl the colors when we closed our operations in Iraq, I was surprised when my eyes filled with tears during the ceremony. I reflected back with pride on the contributions and sacrifice our service members, our civilian corps and our families made over the past 10 years, both to support the war, and to complete the responsible drawdown plan. This last decade has been tough. It's touched almost every sustainer and every logistics organization in the Army, but we have much to be proud of. Hands down, our greatest accomplishment was and is our ability to support our joint warfighters in Iraq and Afghanistan, regardless of the many other demands placed on AMC.

I think it's important for folks to remember that our drawdown in Iraq was one of the largest retrogrades in U.S. history. AMC supported that effort while being engaged on two fronts—Iraq and Afghanistan, while also sustaining contingency operations in places like Haiti, Pakistan and Japan, and while completing the largest BRAC in history. At the same time, we continued the reset of the Army's and our joint partner's equipment after a very hard decade at war to regenerate combat power for future deployments. This meant operating our Depots, Arsenals and Plants at three times the rate we ran them at the height of the Vietnam War.

One of our key initiatives in support of the end of Iraq operations was the establishment of our Responsible Reset Task Force (R2TF). It's a forward-deployed, three-star AMC presence, commanded by the AMC Deputy Commanding General. R2TF served as a large 'catcher's mitt' in Kuwait for all the equipment coming out of Iraq to ensure

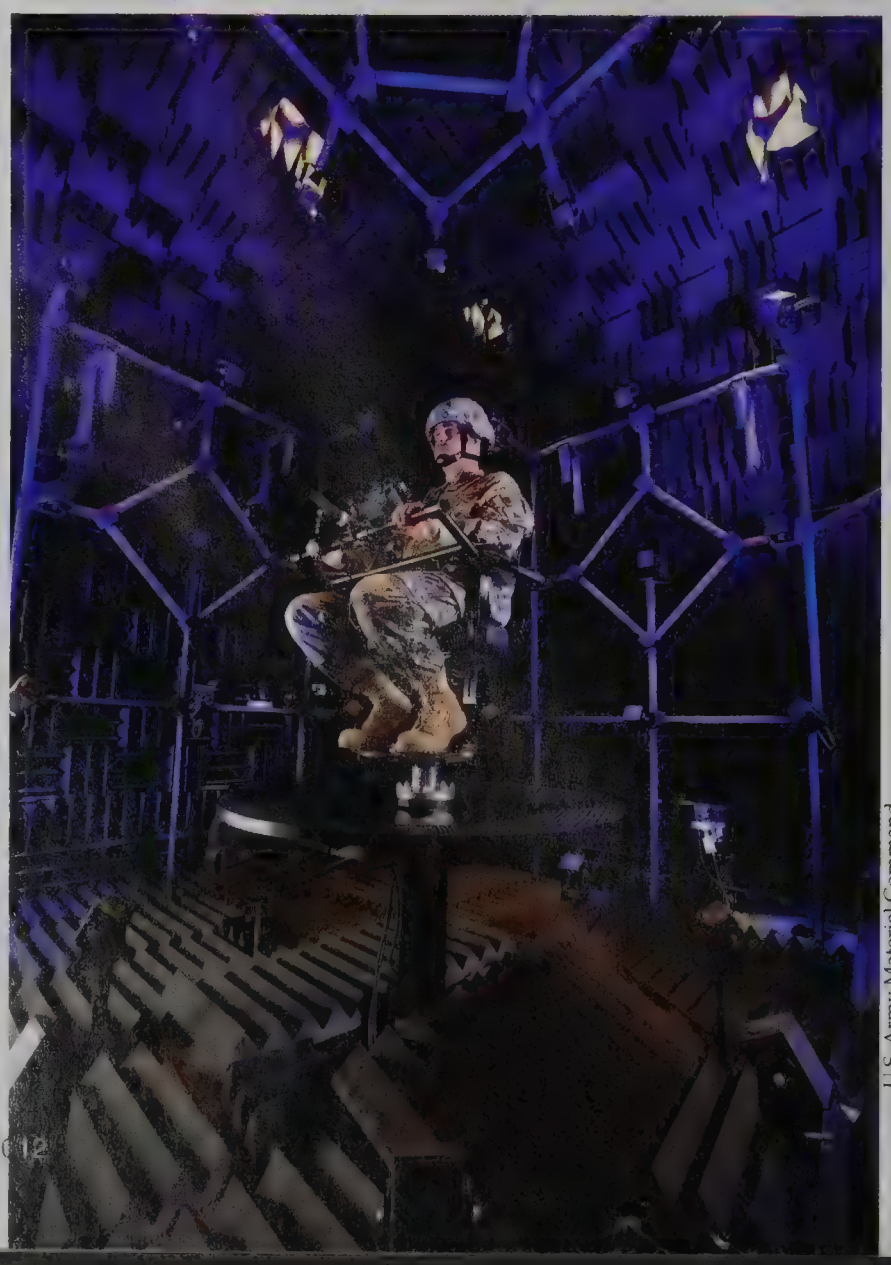
An AMC technician at Tobyhanna Army Depot, Pa., tests an optics system being repaired.

U.S. Army Materiel Command

we could not only track it, but return it, repair it, dispose of it or redistribute it. That's a tough mission to accomplish from a CONUS-based headquarters. In fact, because we were forward deployed, we were able to support efforts to ship equipment directly from Iraq to Afghanistan. More than 50 percent of the equipment needed for the Afghan surge came from equipment coming out of Iraq—a tremendous cost avoidance. This deployable command post-R2TF is now a model for the coming Afghan drawdown as we shift our focus to provide the same level of support for Operation Enduring Freedom.

Management of equipment on this magnitude would not have been possible in the past because the automation tools did not exist. Now, because of advancements in automated systems and forward deployed logistics capabilities, we were able to see the equipment and as a result, we could repair the equipment in theater, and we could ship the equipment straight to Afghanistan instead of shipping from the United States. R2TF's mission was fully integrated with our ARCENT and CENTCOM joint partners in theater. In fact, one of the things I'm most proud of is how today's AMC really does serve as an extension of the CENTCOM and ARCENT families and is a full member of that great, joint logistics team.

There will be new challenges as we transition efforts in Operation Enduring Freedom. For example, as we departed Iraq, we were fortunate to have Kuwait to act as a hub for our equipment retrograde effort. We won't have that in Afghanistan. For those who have not been there: Afghanistan is a land-locked country the size of Texas with less than two percent of the road network and 20,000-foot mountains. Recovering and retrograding equipment will be challenging. We'll want to achieve the same kind of visibility, accountability and velocity of equipment retrograde that we did in Iraq.



A soldier wearing a developmental helmet is seated inside the "sphere room" (named for its spherical loudspeaker configuration) at an AMC test facility located at Aberdeen Proving Ground, Md. The sphere room is designed to create an auditory virtual space, allowing complex testing of the effects of sound on helmets and other equipment.

U.S. Army Materiel Command

Q: Concerning the Iraq retrograde operation, currently, is there a backlog of equipment that you have to work through, or is it done?

GEN Dunwoody: Unlike Desert Storm, there are no "iron mountains" left in Iraq. There are no piles of containers. If you've studied the famous "Red Ball Express" from WWII, you understand that what we had to do in Iraq was equally historic. Just to give you a visual, if you had put all the equipment in Iraq in a single convoy, it would stretch over 2,000 miles. The last of that equipment will come out of the Kuwait staging area at the end of February or early March. Throughout the course of Operation Iraqi Freedom/Operation New Dawn, we deployed, sustained and redeployed a total of 314 brigade-equivalent units

BLIND
DISAPPEAR
STROBE
PREVAIL

Visit us at facebook.com/surefire

The new M720V RAID™ WeaponLight provides white or infrared light with a turn of its bezel selector ring. Two separate dials control white and IR output levels, allowing you to choose blinding white light or just enough illumination to navigate—all activated by a stealth remote tape switch. Powerful strobe and flashlight modes can also be dialed in. The M720V puts all this control in your hands—where it belongs.

SUREFIRE

www.surefire.com/M720V

Selected for USSOCOM Visible Bright Light III program

and, to meet the President's mandate, retrograded more than 2.4 million pieces of equipment. The sheer size of the responsible reset operation cannot be overstated: It was equivalent to closing down a city two and a half times the size of Annapolis, Md. The troop movement to Kuwait was akin to evacuating the entire population of Quincy, Mass., and moving it to Washington, D.C. If we stacked every container that left Iraq, the stack would be 51 miles high—nine times the height of Mt. Everest. This was a truly 'PhD-level' logistics mission on a historic scale.

Q: How has AMC evolved since the start of combat operations to provide operational support?

GEN Dunwoody: Institutional adaptation has been critical in AMC's success. Over the last 10 years, we've really operationalized AMC to link the industrial base to the operational force and to focus on supporting the Joint Force and our Combatant Commanders. Since 9/11, we've built tremendous new capabilities for the joint warfight. For example, our Army Field Support Brigades, Army Contracting Brigades and Transportation Brigades are all now aligned with each of the COCOMs in order to respond to the needs of the Joint Warfighter across the logistics spectrum. Although we are not a joint headquarters, the support AMC provides to joint forces is significant. As GEN Odierno has said, we can never stop asking ourselves, 'Are we joint enough?' Today's AMC is able to 'think joint,' 'plan joint' and 'sustain joint.' That kind of approach is a must for us as we move into a new decade.

These new capabilities, along with R2TF, serve as AMC's face to the field—allowing us to better support our COCOMs and the Army Service Component Commands, while ensuring that we get the equipment back into our depots in order to generate combat power as quickly as possible.

Now, at the same time we were adapting the operational arm of AMC, we were working to adapt AMC's generating arm in order to better synchronize the distribution and redistribution of equipment. I'm proud to say that back in March 2011 the Secretary of the Army designated AMC as the Army's Lead Materiel Integrator (LMI). The LMI approach to materiel management is a transformational model for the Army and will change how the Army equips our warfighter. Because we've been at war, our focus has been on getting the right equipment to our warfighters and getting it to them fast. That's absolutely the right approach, but it's also expensive and it can lead to inefficiencies. So, for all the right reasons, we've developed multiple organizations in the Army that manage materiel; we have multiple piles of stuff being managed—theater sustainment stocks, theater-provided equipment, Army prepositioned stocks, left-behind equipment, prepositioned deployment training sets—and we have multiple information systems used to manage our equipment. With the designation of LMI, we'll leverage state-of-the-art automation to establish one distribution manager, one source for managing repair, and one authoritative database, all working together to provide the kind of visibility we need—visibility of every piece of equipment across the Army. LMI will allow the Army to optimize supply against demand, based on Department of Army's priorities, policies and strategy to minimize friction and make distribution decisions in minutes or hours instead of weeks or months.

Another area where we've made significant changes is in contracting. The 2007 Gansler Commission report was a good wake-up call on the state of our contracting capability. That report, along with our field commanders, reinforced the message that there was a difference between acquisition and contracting. We had let our contracting capability erode, while at the same time contracting requirements skyrocketed in support of the war, and we

U.S. Army Materiel Command

Mine resistant, ambush protected (MRAP) vehicles are lined up for shipment after being withdrawn from Iraq. The Responsible Reset Task Force spearheaded the massive operation that brought equipment from Iraq, repairing or upgrading it and transporting it to where it was most needed. In-theater repair and transportation accounted for much of the equipment necessary for the U.S. Army's surge operation in Afghanistan.

QinetiQ North America develops products and solutions that protect our nation's most critical asset, our warfighters.

From sensors and unmanned systems that identify and assess potential threats to solutions that detect and localize the origin of incoming fire, our products enhance the mission safety and security of our warfighters. Drawing from a deep well of in-house expertise and a clear picture of the challenges our customers face, we apply advanced technology to help safeguard those at risk.

See where innovation lives at www.QinetiQ-NA.com

WHEN IT'S CRITICAL, IT'S QINETIQ.

QinetiQ
North America

found ourselves doing billions of dollars in contracting in theater. It was a skill set that we lost because of downsizing trade-offs. When we deployed into Iraq, few would have thought that we'd be there 10 years, or would have imagined the scope and magnitude of the billions of dollars that we would do in contracting. We had to relearn the contracting lesson and reestablish that core capability. We can't afford to lose it again. We cannot underestimate contracting as a combat multiplier or "weapon system" on the battlefield. Contracting allows us to support Iraqi and Afghanistan First programs, which hire the local population and give them jobs while infusing money into their economy. It is a powerful tool for nation-building and helps enable combatant and field Commanders' theater engagement and partnering strategies.

In 2008, we stood up the Army Contracting Command, a two-star-level command. Now we have contracting support brigades that can deploy forward with trained and certified contract managers who can give oversight to the contracting business in theater. We've hired and trained more than 900 new acquisition professionals to meet growing demand for contract operations. In addition, we're implementing initiatives such as our Service Contract Reform, a tool that will incorporate better buying power and optimization of services contracts across our Army. We are the only service that has a command and control capability associated with our contracting capability. In Haiti, we had our contracting team in place within 72 hours of the earthquake there and ready to do contracting services. That's a tremendous capability. We have come a long way in a short time, but we still have work to do.

Another organization adaptation has been the realignment of Surface Deployment and Distribution Command (SDDC) to AMC with operational control to our joint partners at TRANSCOM. With SDDC assigned to AMC, it allows us to control and synchronize the movement of equipment, supplies and services.

The benefit of all these initiatives is that we have been able to connect what was historically the industrial, CONUS-based organization to the joint warfighter—factory to foxhole, concept to combat. There's still more to do. Our vision for AMC 2020 is to be a globally networked, fully transparent materiel command that serves as a single entry point for the logistics needs of our Army. We want AMC 2020 to bring the full power of the national industrial base to our forward deployed forces.

Q: Concerning Operation Enduring Freedom and the NATO mission in Afghanistan, because we are now relying on the Northern Distribution Network, what are the additional costs and burdens on the logistics system and what part does AMC play?

GEN Dunwoody: SDDC, one of our major subordinate commands, has a huge role, and keeps an eye on the PAK G-LOC (Pakistan ground logistics route) and Northern Distribution Network. The PAK G-LOC is closed right now, and it's somewhat astonishing in itself that it's been closed for more than 60 days and has had minimal impact on our ability to sustain and maintain. The Northern Distribution Network gives us options—a safety net. TRANSCOM and CENTCOM have several proof-of-principle projects, and pilots, under way right now to study our abilities to use different, multi-modal routes. As you well know, multi-modal is much more expensive. Every time you handle—load, unload, load—equipment it is much more expensive.

Q: Meanwhile, as AMC was supporting two major combat operations, the AMC headquarters was being moved from Fort Belvoir, Va., to Redstone Arsenal, Ala., under congressional base realignment and closure law (BRAC). What was entailed in that?

U.S. Army Materiel Command

An AMC contract worker inspects ammunition at the Lake City Army Ammunition Plant, Independence, Mo. The plant is a government-owned, contractor-operated facility, and it has produced millions of rounds of ammunition to support U.S. combat operations since 9/11.

NOW: DEFENSE SOLUTIONS

Visit us at Booth 2117

The defense industry's
largest rugged COTS module
and subsystem vendor.

Contact or visit us at:
www.cwcdefense.com
defensesales@curtisswright.com

CURTISS WRIGHT Controls
Defense Solutions

U.S. Army Materiel Command

An Abrams tank undergoes repair and refurbishment at an AMC facility.

GEN Dunwoody: What I'm most proud of when it comes to BRAC is how our workforce continued to support the warfighter in both theaters and supported contingency operations around the globe—all without missing a beat. It was incredible: two combat operations and contingency operations—Haiti, Pakistan, and Japan—all done at the same time of the BRAC move.

Our BRAC mission—a seven-year terrain walk—is complete, and we did it on time and in many cases ahead of schedule. Not many people know that this last BRAC round was the largest in the history of the Army. In fact, at AMC, BRAC impacted one out of every six employees. Because AMC is mainly civilian, we were asking many of our folks to move for the first time in their lives. That's a tough decision. We had to recognize that and support our unique, talented workforce throughout the BRAC process.

We also used BRAC as an opportunity to reorganize and posture ourselves for the future. We moved into our new headquarters building in June. In the building, we've designed and implemented a world-class operations center that equals any of our commercial logistics providers. For the first time in Army history we have an integrated operations center providing near real-time visibility of the materiel and services our warfighters need.

BRAC allowed us to take advantage of synergies in our organizations as we shifted our AMC centers of gravity to four locations: Redstone Arsenal, Ala.; Aberdeen Proving Ground, Md; Warren, Mich.; and Rock Island Arsenal, Ill. For example, at Redstone Arsenal where our headquarters is located, we also have the U.S. Army Security Assistance Command, the Army Contracting Command, the Expeditionary Contracting Command, the Aviation and Missile Command, and the Logistics Support Activity. Now that BRAC's complete we can focus on enhancing our collaboration, while leveraging our new state-of-the-art technologies.

Q: Regarding the recently announced new national strategy, what capabilities do you have in AMC to meet that strategy?

GEN Dunwoody: I think the new strategy clearly reflects a strong commitment across the Army and DoD—not only to confront the fiscal realities of a new era, but also to avoid the mistakes we've seen during past drawdowns, like the hollow Army we experienced after Vietnam. We're looking at the second and third order effects of the decisions we're making today, to ensure that doesn't happen again. In fact, if we adapt for this new era in a bold and innovative way, I'm confident we're going to be a tremendously capable organization, and AMC will remain well-postured to support our joint forces as we implement our new strategy.

As I've told other folks, at AMC we're taking an 'Ends, Ways and Means' approach to getting after the budget challenges and meeting the requirements of this new strategy. What I mean by that is, we know that our 'ends'—which I define as continuing to provide our joint warfighters the decisive edge through superior sustainment—won't really change. But we know our 'means'—our resources—won't increase and will most likely diminish. So the only thing we can do is to change the 'ways' we do our business. Fortunately, we've been looking at a number of ways to fundamentally change the way we do business while addressing opportunities to consolidate and optimize our capabilities.

One thing we've done, along with our partners at the [Office of] Assistant Secretary of the Army for Acquisitions, Logistics and Technology (ASAALT), was to identify efficiencies and optimize how the Army does materiel development and sustainment. This was a Secretary of the Army-directed review, and it has made us take a hard look at ourselves. We know we can't afford to do business as we have in the past, and we know that we have to be good stewards of the taxpayers' dollars. ASAALT and AMC have identified more than 60 different recommendations that will enhance the full spectrum of our materiel efforts. This effort wasn't just a budget 'drill' though. It was as much about becoming more effective as it was becoming more efficient.

We've also aligned our core competencies through ef-

U.S. Army Materiel Command

AMC employees at the Red River Army Depot, Texas, overhaul a vehicle withdrawn from Iraq during the responsible reset operation to ready it for reissue.

forts like the transfer of installation Directorates of Logistics from our garrison commanders to AMC, along with realigning responsibility for the maintenance of TRADOC's training fleet to AMC. Instead of all of us doing our own thing in different headquarters, we're right-sizing the Army's maintenance and sustainment capability.

Regarding a Pacific-Asia strategy, we already have flexibility. When we built this deployable command post, it was designed to go into Kuwait to help in Iraq. Now we're turning its focus on Afghanistan. It could, along with the rest of our new operational and deployable capability, go to the Pacific just as well. It is a capability that we want to institutionalize in the Army. By operationalizing our command and bringing AMC into the foxhole, our soldiers and civilians have proven themselves and earned the credibility and trust of our Joint Force commanders.

Q: You have fought the whole war—the operations in Afghanistan and Iraq—as a logistics general officer. What lessons learned would you share with your fellow logisticians?

GEN Dunwoody: It's all about collaboration. Every person counts in this business. And you've got to bring all the players together to make sure they understand the opportunities and capabilities. When visitors come to this headquarters, they are amazed at our new capabilities. Similarly, we have to make sure that we understand other service's capabilities so we can optimize and complement each other on the battlefield. Trust and communication help us to better understand each other; they enable us to resolve differences and build confidence and respect. Trusting relationships create environments where creative ideas and problem solving can flourish. At AMC, our success is founded on increasing our effective relationships among all of our key stakeholders—ASAALT, our COCOMs, our sister services and with industry. Trust is really a must for those of us in our business as we confront the challenges of the years ahead.

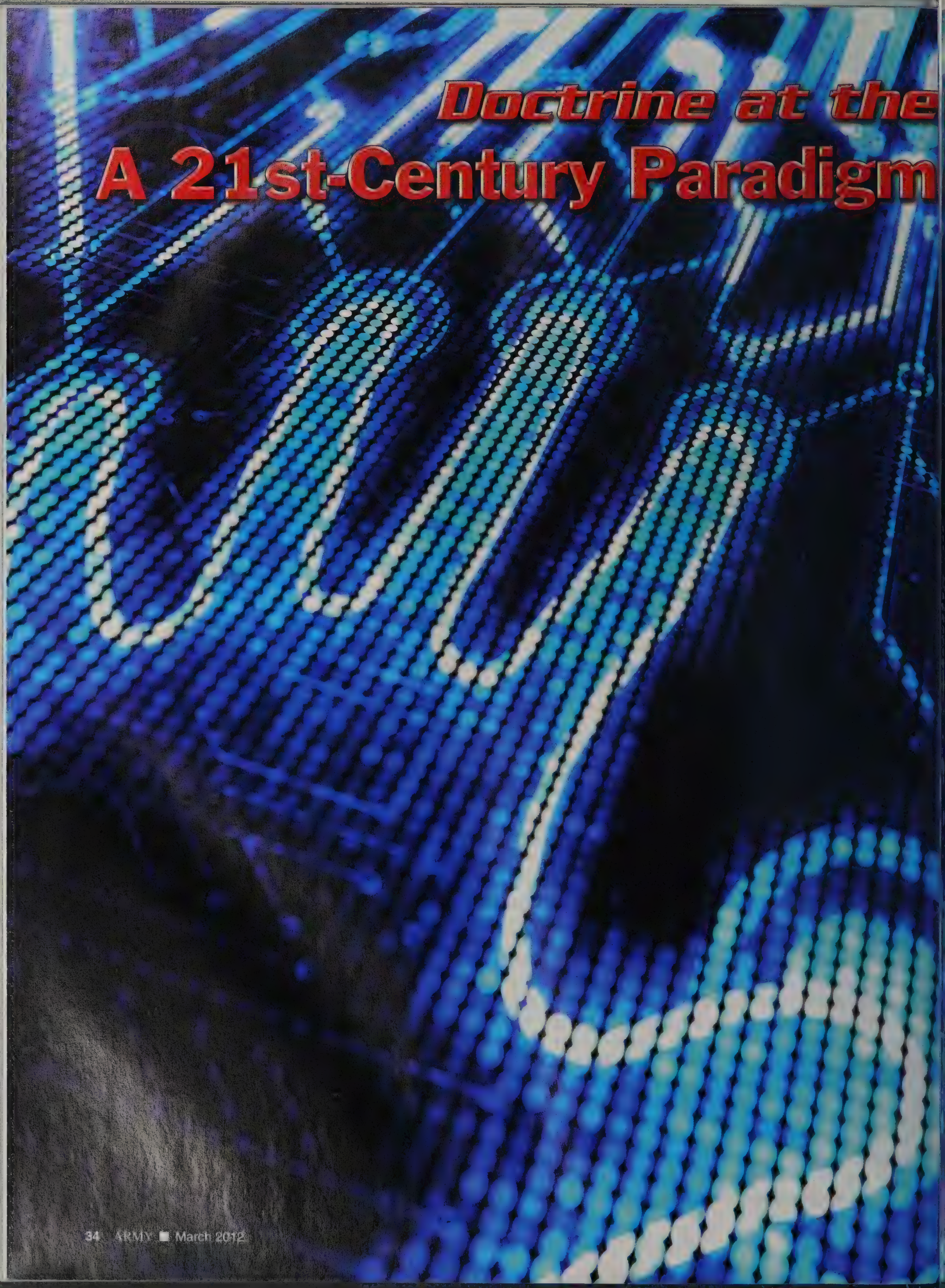
Q: Is there anything else that you would like to add?

GEN Dunwoody: First, I'm so proud of our AMC workforce. Our success always comes down to our people. At AMC we have an incredibly talented workforce made up of more than 69,000 people and 97 percent are civilians. Thousands of those folks have deployed since 9/11 and many have skills and abilities that exist nowhere outside the Army. I really want AMC to be a champion for our Civilian Corps.

Second, I'm very proud of our logisticians—and they should be proud of all they have accomplished. We have to realize that we have been an Army at war for 10 years, and we have a decade of soldiers and officers and NCOs that didn't come in with the same training or experience in property accountability that previous generations had. It's understandable—we've been a busy Army—so now we focus on back to basics. We now have the tools, the time and most importantly the talented leaders to help us get back to the basics and fundamental principles in logistics and maintenance.

Finally, we all understand there are some challenging times ahead as we confront an era of reduced resources, uncertainties and emerging threats. I am very honored and proud to have been given the opportunity to command AMC, which sustains our Army, the strength of our nation, as we provide America's warfighters with the decisive edge. I truly believe if we can accomplish all we have over the last decade, working together, we can overcome any obstacles in our future. ★

Doctrine at the
A 21st-Century Paradigm



Speed of War
For Army Knowledge

By LTG David G. Perkins
and
CPT Nathan K. Finney

It is not hard to find a negative news report today that describes the effects of a decade of war on our Army: elevated suicide rates, the damaging effects of traumatic brain injury and the impact of multiple deployments on families. While these are most assuredly issues of great concern—and trends that we are institutionally working diligently to reverse—there are also positive lessons to be drawn from a war-tested force. Among these are the knowledge and experience gained by our soldiers after a decade fighting a wily and unscrupulous enemy, while simultaneously working to protect and build the capacity and capability of peoples very different from us.

These experiences provide us a unique opportunity to leverage our past to prepare for the future. As an Army we have learned valuable lessons and developed a better understanding of 21st-century warfare, and with the assistance of Web-based technology, we have a unique opportunity to

rapidly codify this knowledge into doctrine and preserve it for future generations.

To capitalize on this opportunity and revolutionize the way we develop and share our doctrine, we must first restructure our body of knowledge and identify the principles critical to our Army as the nation's land force of decisive action. To do this, the U.S. Army Training and Doctrine Command developed Doctrine 2015, an initiative that will transform our doctrinal base to deliver critical knowledge—concise, accessible and current—to the point of need. This process streamlines the number and length of current doctrinal manuals while leveraging current technologies, such as the MilWiki platform, to inject fresh and contemporary knowledge—changes that have been developed, applied and proven in the field by soldiers—into our doctrine.

As an Army we have learned valuable lessons and developed a better understanding of 21st-century warfare, and with the assistance of Web-based technology, we have a unique opportunity to rapidly codify this knowledge into doctrine and preserve it for future generations.

---

*LTG **David G. Perkins** is the commander, U.S. Army Combined Arms Center and Fort Leavenworth, Kan. Previously he commanded the 4th Infantry Division and was the U.S. Division-North commander in northern Iraq. **CPT Nathan K. Finney** is an Army strategist currently serving at the Combined Arms Center as the commanding general's speechwriter.*

Restructuring our Knowledge

Doctrine 2015 transcends the traditional Army paradigm, whereby we developed and published approximately 550 doctrinal manuals on a multiyear cycle, revitalizing our doctrinal base with a series of tabletop publications, digital applications and online resources designed to revolutionize how we address the learning needs of a dynamic force. This "doctrine at the speed of war" provides intellectual currency at the point of need: the soldier on the ground.

The new structure incorporates four levels, broken out to support three overall levels of knowledge necessary to conduct land operations. The first level of Army doctrine will be Army Doctrine Publications (ADPs), which are 15 foundational manuals that capture the enduring principles inherent in land warfare in the 21st century. These ADPs will have a familiar naming and numbering convention, similar to our traditional doctrinal manuals, but they will be only about 10 pages in length and will focus on time-proven, fundamental principles—the big ideas that make up the core of our knowledge base.

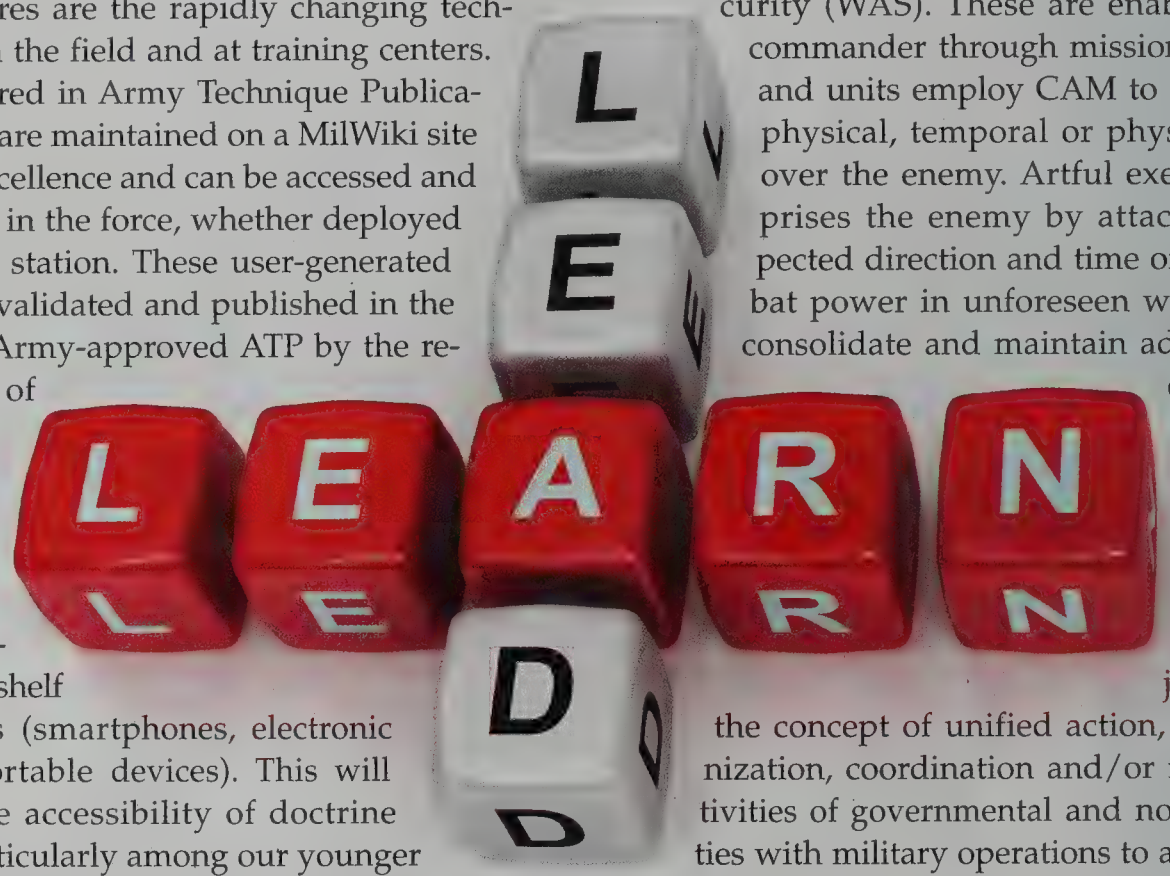
Beneath each ADP will be supporting publications called Army Doctrine Reference Publications (ADRPs), which expand upon the more general principles in the linked ADP and describe the operational concepts that underlie them. These publications are necessarily longer, each containing approximately 100 pages of information. In addition, digital content will illustrate the basic principles in a way that is clear and engaging.

Then, to codify time-tested tactics and procedures and fully explain the most current tactics and procedures used

THE APACHE ADVANTAGE: SUPER CONNECTIVITY.
AH-64D Apache Block III delivers unprecedented networked connectivity between Apaches and other rotorcraft, aircraft, ground vehicles and foot soldiers. On-cost and on-schedule, the newest Apache also features an open architecture and 25 new technology insertions: to ensure superior performance and reduce cost of ownership—technology for total advantage.
BOEING

in the field, a small body of field manuals will undergird both the ADPs and ADRPs. Unlike today's several hundred field manuals that address all the details of our warfighting functions, Doctrine 2015 will include only 50, each limited to 200 pages. They will capture all of the same details as concisely and clearly as possible. These manuals will also contain Army procedures, such as medical evacuation or call for fire, that must be applied precisely and consistently across the force to perform our military functions.

Underneath these principles, operational concepts, and tactics and procedures are the rapidly changing techniques developed in the field and at training centers. These will be captured in Army Technique Publications (ATPs), which are maintained on a MilWiki site by the Centers of Excellence and can be accessed and added to by anyone in the force, whether deployed or training at home station. These user-generated comments are then validated and published in the Department of the Army-approved ATP by the responsible Centers of Excellence.



All of the Army publications will be made available and enhanced by leveraging digital applications and off-the-shelf media technologies (smartphones, electronic tablets or other portable devices). This will greatly increase the accessibility of doctrine across the force, particularly among our younger generations, who have grown up "interacting" with information in this format.

A Unifying Operational Concept

The flagship manual developed through the Doctrine 2015 process was ADP 3-0 *Unified Land Operations*. This publication contains the central unifying concept that will drive the development of every other aspect of Doctrine 2015. The central idea of *Unified Land Operations* is that Army units seize, retain and exploit the initiative in any operation. Initiative is crucial to gain and maintain a position of relative advantage in sustained land operations and thereby create conditions for favorable conflict resolution.

There is nothing new about the concept of seizing, retaining and exploiting the initiative in order to achieve military goals. It is the essence of what Army leaders do and have done throughout history. We force our adversaries to fight on our terms, at times and places of our choosing, and in ways that place them at the greatest disadvantage. We achieve a superior position through the destruction of enemy forces, capabilities or sources by seizing key terrain, protecting key populations, building partner capacity or through a tailored combination of these. *Unified Land Operations* uses lessons learned from a decade of war to evolve the best from past doctrine and direct those principles toward anticipated future threats to our nation.

As a unifying operational concept, *Unified Land Operations* is a natural evolution of our doctrinal thought from AirLand Battle in the 1980s to full spectrum operations about a decade ago. As in previous doctrine, unified land operations are executed through decisive action in the offense, defense, stability and defense support to civil authorities, separately and in combination. This decisive action is achieved by means of the Army's core competencies, combined arms maneuver (CAM) and wide-area security (WAS). These are enabled, in turn, by the commander through mission command. Leaders and units employ CAM to achieve a position of physical, temporal or physiological advantage over the enemy. Artful execution of CAM surprises the enemy by attacking from an unexpected direction and time or by employing combat power in unforeseen ways. WAS is used to consolidate and maintain advantage over an enemy or to deny the enemy a position of advantage.

ADP 3-0 *Unified Land Operations* represents the Army's contribution to the joint community and the concept of unified action, that is, the synchronization, coordination and/or integration of the activities of governmental and nongovernmental entities with military operations to achieve unity of effort. *Unified Land Operations* provides depth and versatility to combatant and joint task force commanders across the globe. If we successfully implement and internalize this doctrine, we will achieve an adaptable Army capable of being the nation's go-to force for every mission.

Foundation of the Army

The restructuring of our doctrine and the development of a solid unifying operational concept are not meant to merely create a perception of progress. Leaders across the Army, from the Chief of Staff of the Army to our youngest sergeants, recognize that we must seize the initiative we now enjoy as we reflect on our decade of war. From this effort we are establishing a foundation for training, education and equipment that will affect our Army for decades to come.

Doctrine 2015 will accomplish this by improving our soldiers' and leaders' understanding of current doctrine through increased accessibility and more current links to today's operational environment. Beginning with ADP 3-0, the Army is articulating our unifying operational concept, providing tools that are tailorable to the needs of each individual soldier, and creating products adaptable to the unique learning needs of a new generation of soldiers and leaders. Our force has been operating at the speed of war for a decade—it's time our doctrine caught up. ★

It's in your nature, so it's in our vehicles.

Navistar Defense doesn't just build the most dependable military vehicles. We follow them into the field to provide the support and service that keeps them mission ready. Like you, we're committed to doing whatever it takes to get the job done. With more than 100 years of truck manufacturing under our belts, we've got the skills. But it's our dedication you'll value most. With Navistar Defense, you'll never ride alone.

NAVISTAR® DEFENSE

MAXXFORCE D

engineering | manufacturing | sustainment | navistardefense.com

Synchronized Fielding: From White Sands to the

By Scott R. Gourley

U.S. Army/Claire Schwerin

Soldiers from the 2nd Brigade Combat Team (BCT), 1st Armored Division, camp near a simulated mountain village to evaluate networked capabilities in realistic terrain during the Army's first Network Integration Exercise (NIE) last June and July at White Sands Missile Range, N.M.

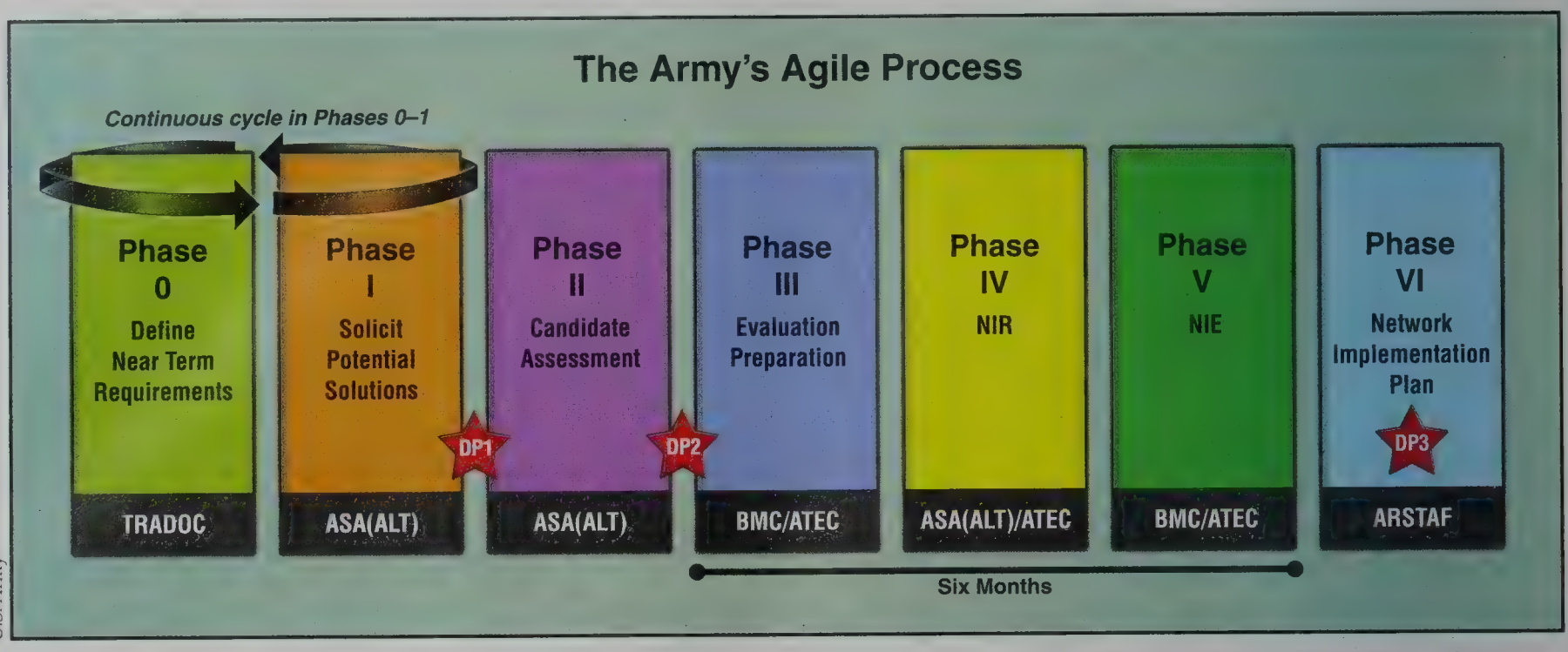
While much of the Army's modernization attention has been focused on the Network Integration Evaluation (NIE) events being undertaken by the Army's 2nd Brigade Combat Team, 1st Armored Division (2/1 AD) at White Sands Missile Range, N.M., those activities represent just part of a much larger modernization process that will actually begin to deliver brigade sets of advanced combat capabilities beginning in fiscal year (FY) 2013.

Soldiers from 2nd BCT, 4th Infantry Division, leave the helicopter that transported them and walk to Village Stability Platform Chenar, an isolated post served by only dirt roads in Khakrez District, Kandahar Province, Afghanistan, in January.

Army Agile Process

The actual delivery of those capabilities to a combat unit is prefaced by the overall Army Agile Process, a seven-phase process (phase 0–phase VI) that includes definition of near-term requirements, solicitation of potential solutions, candidate assessments, evaluation preparations, lab-based risk reduction, NIE and a network implementation plan.

According to Paul Wilson, project director of synchronized



U.S. Army

The Army's Agile Process consists of seven phases grouped in three basic areas. In a continuous cycle, Phases 0 and 1 focus on identifying requirements and potential solutions, while II through IV focus on assessing potential solutions in both laboratory and operational environments. During Phase VI, Headquarters, Department of the Army, analyzes the recommendation report by Training and Doctrine Command at the conclusion of each network integration exercise and determines how to proceed.

fielding for the System of Systems Integration Directorate under the Office of the Assistant Secretary of the Army for Acquisition, Logistics and Technology (AL&T), the output of that complete Agile Process will be what service planners term synchronized fielding.

"The first pieces are the source selection, lab assessments and up-front work done in futures," he explained. "That's followed by the NIE, when we actually do the evaluations and provide recommendations to the leadership of the Army for going forward. Then the output of the process is the synchronized fielding, when we mature the selected designs, produce something and field it to units in the Army, with units heading to Afghanistan being the primary targets for fielding."

As noted previously, the process starts (phase 0) with the definition of near-term requirements under the lead of U.S. Army Training and Doctrine Command. Those requirements then feed a solicitation of potential solutions (phase I) under the lead of AL&T.

An excellent example of this process surfaced in October 2011, when the Army released a sources-sought announcement, asking for "additional industry sources with mature solutions to enhance existing network systems capabilities" and participate in the NIE 12.2 event in the spring at Fort Bliss, Texas, and the adjacent White Sands Missile Range.

The notice sought additional candidate systems under evaluation (SUEs) against a narrow set of specific, identified gaps in the current and evolving networked equipment solution set. Those gaps included a multichannel radio; a low-cost-low-space weight and power Tactical Cross Domain Solution; a small form factor, modular transit case based company command post; a tactical router; and improved operational energy.

Industry respondents were given until October 31, 2011 to provide white papers on their candidate solutions. Those industry white papers fed a subsequent assessment of the candidate SUEs (Agile Process phase II).

Positive assessment of the industry white papers/briefing responses led to a candidate system moving to Aberdeen Proving Ground, Md., for lab assessment (phase IV), while overlapping preparations are already under way (phase III) at Fort Bliss/White Sands for potential inclusion of that system in a future NIE.

Lab Assessment/Risk Reduction

According to Kelly Alexander, project director for futures in the System of Systems Integration Directorate, the lab-based risk-reduction phase (phase IV) of the Agile Process starts with a two-part lab assessment.

"The first part is a characterization of the system," she said. "If it's a radio, we have a radio lab that will evaluate the boundaries of its performance. If it's a sensor or some other system, its technical performance will be evaluated in a different lab. Then the second part of the lab assessment is an integration with the baseline network. So we answer two essential questions with the lab assessment. The first is whether the system performs as indicated when we invited it into the event ... and the second is whether it can be integrated into the network baseline system."

Asked about the evolution of the Agile lab-assessment activities over the past year, Alexander said the process "will not fully be in place until NIE 12.2."

Instead, the recently completed NIE 12.1 underwent what was dubbed an abbreviated Agile Process in which 97 nominated SUE candidates (54 from government and 43 from industry) were eventually reduced to 46 that entered the field with 2/1 AD for the event itself.

Scott R. Gourley, a freelance writer, is a contributing editor to ARMY.

VERSATILITY COMES FULL CIRCLE

The cordless Knucklehead® has an unparalleled ability to target light wherever you need it. Featuring an articulating head that can rotate a full 360°, a powerful magnet and a durable, stowable hook, the Knucklehead provides an even light pattern to make working easy on you and your eyes. Whether you're in the field or at base, its combination of rechargeablility and long LED life make it one of the most cost efficient work lights on the market. And Knucklehead is made from a high-impact, super-tough engineered nylon polymer that is chemical and corrosion-resistant. Under the hood, two heads are better than one. If one of them is a Knucklehead.

C4 LED

MCN623001F010359
(ORANGE VERSION)

MCN623001F010360
(BLACK VERSION)

STREAMLIGHT®
Heroes Trust Streamlight

KNUCKLEHEAD®

©2012 STREAMLIGHT, INC. | 30 EAGLEVILLE ROAD, EAGLEVILLE, PA 19403 | 800.523.7488 | WWW.STREAMLIGHT.COM

"NIE 12.2 has had a much more robust lab assessment," Alexander noted. "For 12.1 we did do some amount of characterization, and we also did some integration risk reduction in the lab, but this time [12.2] all of the candidates will have the lab assessment. Last time it was primarily just radios like the 117G Harris radio—specific systems that had a high value as part of the event."

Although the physical laboratory infrastructure supporting the assessment process is still taking shape as of this writing, many of the assets are already available with alternative support when necessary.

"The most functionally ready lab is the radio lab, referred to as the Radio Evaluation and Analysis Lab," Alexander said. "That's under the purview of CERDEC [Communications-Electronics Research, Development and Engineering Center], which is part of the C4ISR campus on Aberdeen, but we do have capability for assessment of all of the systems, occasionally collaborating with some of our partners across the research and development community to evaluate any of the systems that come in.

"The bigger challenge is the integration piece," she explained. "Some of those labs are still standing up. So what they are having to do for some of the different [2/1 AD] battalions is to stand them up in the lab virtually and then take them down before using the same lab to virtually stand up the next unit."

She offered the example of 2/1 AD's 1st Battalion, 6th Infantry and 1st Battalion, 35th Armored Regiment, which have evaluated different network architectures—"bridge" and "objective"—during the NIEs.

"We couldn't have both of them [virtually] up simultaneously," she said. "So it's a little bit of a challenge, and a little creativity is required, but we are still able to do the lab-assessment and risk-reduction activities."

AMC Cooperation

The activities serve to highlight a critical enabler of Army modernization: extensive cooperation between organizational entities across the Army.

According to Alexander, "AL&T, Army Materiel Command (AMC), through its Research, Development and Engineering Command (RDECOM), and the Army Test and Evaluation Command, also on Aberdeen, all participate through a collaborative effort that provides an environment for risk reduction, sharing information, building instrumentation planning and understanding some of the characteristics of the network, so that when it goes to Fort Bliss [for] the NIE event, we can continue to troubleshoot and help to maintain the integrity of the network through the event."

RDECOM's CERDEC, for example, supports the Agile Process by providing white paper technical evaluation leads (phase I), candidate assessments (phase II) and continuing work through both network (C4ISR Systems Integration Lab) and Vehicle (Platform Integration Facility) labs (phases III, IV and V).

The C4ISR Systems Integration Lab, slated to open this month, will replicate 2/1 AD Brigade "slice" in a repeatable, consolidated lab environment (7,000 square feet), featuring live/virtual/constructive environment capability, dedicated network operations cell, 300 application displays across 50 workstations, 384 virtualized servers, organic RF simulation capability, and 72 terabytes of storage for data collection.

Likewise, CERDEC's Prototype Integration Facility (PIF) provides engineering design, development, fabrication, installation, integration, testing and fielding of shelter, vehicular, aircraft, watercraft and soldier-worn prototype C4ISR systems.

It's not just the labs at Aberdeen that are supporting the process. AL&T representatives pointed to support from lo-

U.S. Army/Claire Schwerin

Warfighter Information Network Tactical (WIN-T) equipment is placed at White Sands Missile Range in preparation for NIE 12.1. The Tactical Communications Node for WIN-T Increment 2, the Army's on-the-move satellite-based network, looms above the rest of the equipment.

Doing the Right Things Right

Providing Logistics Support in Challenging and Remote Locations

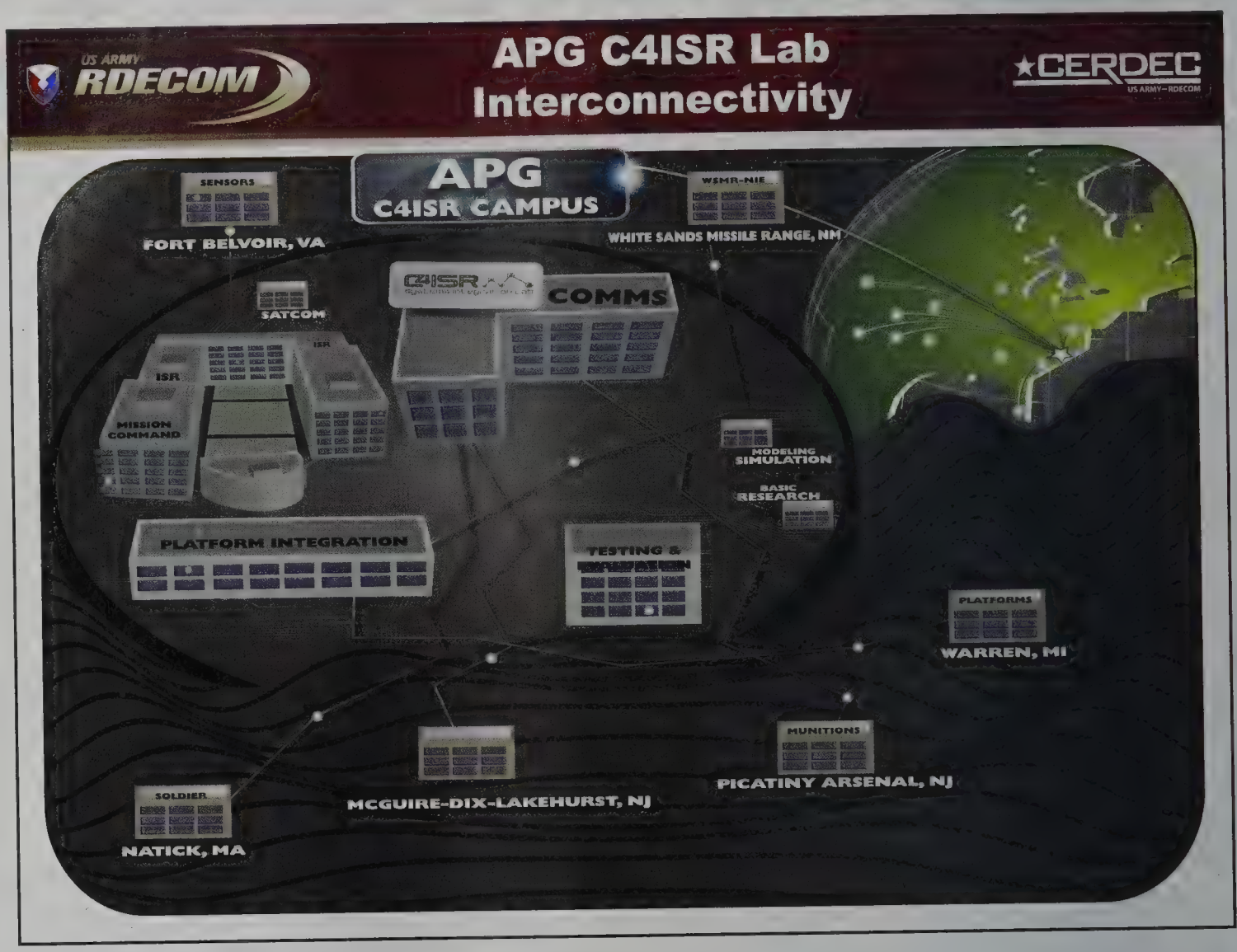
From rapid deployment and life support needs, emergency response and maintenance, to supply chain management and transportation, Fluor provides full mission capabilities. Our record of dependability, performance and safety set us a world apart in the markets we serve.

FLUOR®

Safety, Performance, and Integrity

www.fluor.com

© 2008 Fluor Corporation. All rights reserved.



U.S. Army

The Command, Control, Communications, Computers, Intelligence, Surveillance, Reconnaissance (C4ISR) Lab on the C4ISR campus at Aberdeen Proving Ground, Md., with support from other centers, gathers and assesses information that leads to synchronized fielding of advanced combat capabilities through NIEs.

cations like the Tank Automotive Research Development and Engineering Center (TARDEC) PIF at Detroit (Mich.) Arsenal. TARDEC's PIF, a one-stop shop for design, machining, metalworking, coating and assembly capabilities, is reportedly working on Mine Resistant Ambush Protected vehicles (MRAPs) in support of other activities under way at Aberdeen.

"So AMC's TARDEC folks not only work to support AL&T efforts, but there is also cross talk between TARDEC and CERDEC to make sure that things get integrated, both from CERDEC's network focus and from TARDEC's platform focus, to ensure that the platforms are able to support the network," Wilson added.

Transition to NIE

"There is some simultaneity going on during this process," Alexander said. "During the lab events at Aberdeen, down at Fort Bliss they are also doing some of the physical integration planning for the different platforms—MRAPs, and so on—that will host some of those systems. So there is an ongoing collaboration there as well."

The collaboration also includes a number of transition points in the movement of systems and technologies from Aberdeen to the NIE (phase V).

"The first one, typically, is after the initial decision point, when the gatekeepers have accepted our '1–N' list and we hold what we call a bullpen session at Fort Bliss to familiarize them with the next steps," she explained. "Before that Decision Point 2 is when the primary lab information is complete and we can make a more robust recommendation. That's the next big transition point to Fort Bliss. Then, as they begin to physically integrate systems and encounter challenges, we do continuously revisit and determine if the candidates remain viable for the NIE event.

"COL Gail Washington, project manager, Capability Package, AL&T System of Systems Integration Division and I meet weekly at a minimum to discuss whether or not we are still tracking, and at the lab risk-reduction activities continue. If we encounter challenges we advise the gatekeepers whether or not to proceed.

"I kind of put it into three 'buckets'—assess, integrate and rehearse," she summarized. "It's that up-front work and the collaboration within the community of interest to make things happen, and the payoff to that will be synchronized fielding. The NIE as an event will shape and mature the network, but the real payoff will be at the end, when we see that fully matured network begin to enter the field."

Current synchronized fielding activities are focused on the systems and network technologies associated with Capability Set 13, which is now maturing under the NIEs. The information derived through all phases of the Agile Process feeds the development of the Network Implementation Plan (phase VI) under the lead of the Army staff.

The Initial Brigades

As of this writing, Army leadership is still determining which specific brigades will receive the initial Capability Set 13 package.

"There are some initial thoughts that are being coordinated with Forces Command and some of the folks that are

AUSA WINTER • 22–24 FEBRUARY, 2012 • BOOTH#: 2523

OWN THE MISSION

KONGSBERG'S PROTECTOR transforms any military vehicle into an unbeatable lethal and secure platform. With its superior target acquisition and precision fire control systems, crewmen can immediately identify and defeat targets within a 1,000-meter radius. And its innovative design enables effective machine gun operation from within the safety of the vehicle's armored capsule. Proven, with over 10 million hours of successful combat service, PROTECTOR owns the mission.

KONGSBERG

PROTECTOR CROWS

KONGSBERG Protech Systems
1725 Duke Street, Suite 600 · Alexandria · VA 22314 · USA
Phone: +1 703 838 8910 Fax: +1 703 838 8919
Email: kps.usoffice@kongsberg.com

The Agile Process Continues

One of the keys to the success of the Army's Agile Process is the implementation of a continuous cycle between phase 0 (definition of near-term requirements) and phase I (soliciting potential solutions).

Evidence of this continuous cycle appeared in mid-January with the release of a new "sources sought" announcement calling for interested sources with mature solutions to enhance existing network systems capabilities to participate in NIE 13.1, now scheduled to occur in October/November at Fort Bliss, Texas, and the adjacent White Sands Missile Range, N.M.

As with earlier solicitations, the latest announcement "seeks solutions with a narrow focus on Specific Identified Gaps in the current and evolving networked equipment solution set." These gaps include multi-channel tactical radio; Mission Command on the Move; low-cost-low-space weight and power Tactical Cross Domain Solution; joint participation capability (United States and Allies); aviation extension; scalable small form factor, modular transit case satellite communications terminal and baseband; mission command in-garrison training; improved operational energy; and integrated network management.

The multi-channel tactical radio, for example, is visualized with myriad specified characteristics like the ability to host both Soldier Radio Waveform (SRW) and Wideband Networking Waveform (WNW), interoperation with SRW 1.1 and WNW 4.0.5 running on the Joint Tactical Radio System (JTRS) Ground Mobile Radio, and interoperation with SRW running on the JTRS handheld, Manpack, small form fit manpack radio and the Rifleman Radio. Additional "desired" characteristics include features like the ability to be managed by the SRW Network Manager and JTRS Wideband Network Manager or JTRS Enterprise Network Manager as well as a range of other technical performance features.

The announcement cautions that "Sources must understand the entire financial burden of participating in this process to include: submitting a White Paper and Oral Presentation, submitting solution candidates for laboratory testing at a Government facility, undergoing integration risk reduction at Aberdeen Proving Ground, Md., participating in pre-NIE integration activities, training soldiers to operate the candidate solution, and participating in and supporting the candidate solution in the NIE event, will be the sole financial responsibility of the source."

According to the schedule accompanying the announcement, industry white paper/briefing products for their NIE 13.1 candidates were due by February 3, 2012. The subsequent candidate assessment process will lead to laboratory assessments March 6, 2012–August 6, 2012.

NIE 13.1 is currently scheduled from October 22 to November 18.

in charge of the ARFORGEN [Army Force Generation] model for what is deployed, what is available and the windows that need to be met," Wilson offered in mid-January. "So we are trying to nail that down, based upon when we are going to be able to execute the fieldings, and we're trying to bring it to closure pretty quickly.

"Our goal is to [field] as many as eight IBCTs [infantry brigade combat teams] during FY 2013," he continued. "It remains to be seen if we can actually achieve that. We know that's a substantive amount of capability in our first year, but that's what we are shooting for."

While the initial brigades are all infantry brigade combat team structures, other brigade combat teams—both Heavy and Stryker—will follow shortly, possibly starting in FY 2014.

"There are agreements being put in place between TARDEC and CERDEC so that when we field we will continue the cross talk across the entire Agile Process," said Elizabeth Miller, chief engineer of synchronized fielding for the System of Systems Integration Directorate. "It will help to ensure that we can have a production-ready design when we … need to field. We are looking across all phases … to make sure that we can field a viable solution in about a 12-month window—as much as possible—without having to go back and do a lot of redesign work for the vehicle platforms."

"This is a continuing dialogue," echoed Wilson. "We have all the PEOs [Program Executive Offices] and PMs who have systems and platforms that will be involved in this over the next several years so that we can start to identify where the issues and disconnects are. If we find that a particular platform will have a space weight and power issue in carrying the systems [needed] for [eventual] network integration, now is the time to start working it. Now we still have time to react and work with the Army staff to make those changes. Sooner is better than later, and certainly we want to try now by getting that dialogue started."

Wilson noted continual improvements in the early dialogue process. "We have identified where the disconnects are in the process. Certainly if you compare the recently executed NIE 12.1 to what was done at the first E-IBCT event a couple of years ago, this is light years better," he said. "It's providing valid information for the leadership to make informed decisions to move the Army forward."

"Synchronized fielding is one of those things in which the Army can take a lot of pride," Wilson added. "It's truly a team effort. It requires almost every PEO and every PM in the Army to work together to make it happen, and it's not just the PEOs and PMs; it's also the Army Staff, who serve as the enablers that make it all possible. The demonstrated willingness to work together is truly an Army-wide effort of which we can all be very proud." ★

Strategic Reset

The Army will undergo a strategic reset over the next five years in the wake of the national strategic plan announced by President Barack Obama in January called "Sustaining U.S. Global Leadership: Priorities for 21st Century Defense" and coinciding budget decisions that call for a reduction in the active Army's end strength and cuts in the number of brigade combat teams.

By Dennis Steele
Senior Staff Writer

Associated Press

From left, Chairman of the Joint Chiefs of Staff GEN Martin E. Dempsey, President Obama and Secretary of Defense Leon E. Panetta en route to a briefing at the Pentagon where the President and Secretary delivered remarks outlining a new strategic plan for the Defense Department in January.

U.S. Army Chief of Staff GEN Raymond T. Odierno said, "The defense strategic guidance was clear: We will strengthen our presence in the Asia-Pacific region; we will remain globally vigilant, especially in the Middle East; and we will continue to build and strengthen critical partnerships and alliances around the globe."

He said, "Accordingly, the time is strategically right to reduce the Army's force structure…We will reduce our active force end strength from 570,000 to 490,000, which will include a reduction of at least eight brigade combat teams."

The active Army currently has 45 brigade combat teams (BCTs). The thrust of the strategic plan called for overall cuts in U.S. conventional ground forces. (The Marine Corps also will lose 20,000 end-strength positions.)

"It is important to note, however, that an Army of 490,000 in 2017 will be fundamentally different and more capable than the Army of 482,000 that we had in 2001," GEN Odierno added.

The force will continue to be technologically upgraded, and under consideration is a plan to boost the combat power of some of the remaining BCTs by adding another maneuver battalion to their structure with those battalions coming from the BCTs slated for elimination.

GEN Odierno said that such a consolidation would eliminate overhead (in the form of BCT headquarters and support elements) while sustaining combat capability.

Defense officials noted during background briefings with reporters, however, that further BCT cuts could be made over the long term, possibly reducing the active Army total to 32, hence GEN Odierno's phrasing of "at least" an eight-BCT reduction.

"End-strength reductions will occur over the next six years," the Chief of Staff said. "We will follow a drawdown ramp that allows us to take care of soldiers and families while maintaining a ready and capable force to meet any requirements, including our current operations in Afghanistan. We will also continue to look at the optimum design of our brigade combat teams and enable units, leveraging the lessons learned in combat." He added, "This analysis is ongoing and we do not expect any decisions for several months, but it could lead to a reduction of additional brigades if we decide to increase the capability of our current brigade combat team structure."

Officials noted that the Army's heavy BCTs are most likely to be reduced, at least in the initial phase, protecting infantry and Stryker BCTs. Decisions regarding further BCT reductions could be made before the start of fiscal year (FY) 2013. The Army's combat aviation brigades will not be reduced, officials said.

"Capability is more important than size," said Chairman of the Joint Chiefs of Staff GEN Martin E. Dempsey, noting the strategy and budget request both call for a smaller force.

GEN Dempsey said the decisions represent a "responsible investment in our national security. But make no mistake, the tradeoffs were tough. The choices were complex."

"The primary risks lie not in what we can do, but in how much we can do and how fast we can do it," the Chairman said. "The risks, therefore, are in terms of time and capacity…I am convinced we can properly manage [risks] by ensuring we keep the force in balance, investing in new capabilities and preserving a strong reserve component," he added. "As I've said before, we will face greater risks if we do not change the way we've been doing things," he noted.

"We get leaner. But this budget does not lead to a military in decline," GEN Dempsey said. "It leads to a joint force that is global and networked, that is versatile and innovative, that is ably led and that is always ready. That joint force can win any conflict, anywhere," the Chairman added.

Under the strategic plan, technological defense solutions

IED protection that goes wherever you go.

The IED threat is always there. And with CREW Duke, so is your protection against it. Invented by SRC and manufactured by SRCTec, this is a tactically superior, state-of-the-art jamming system that gives you:

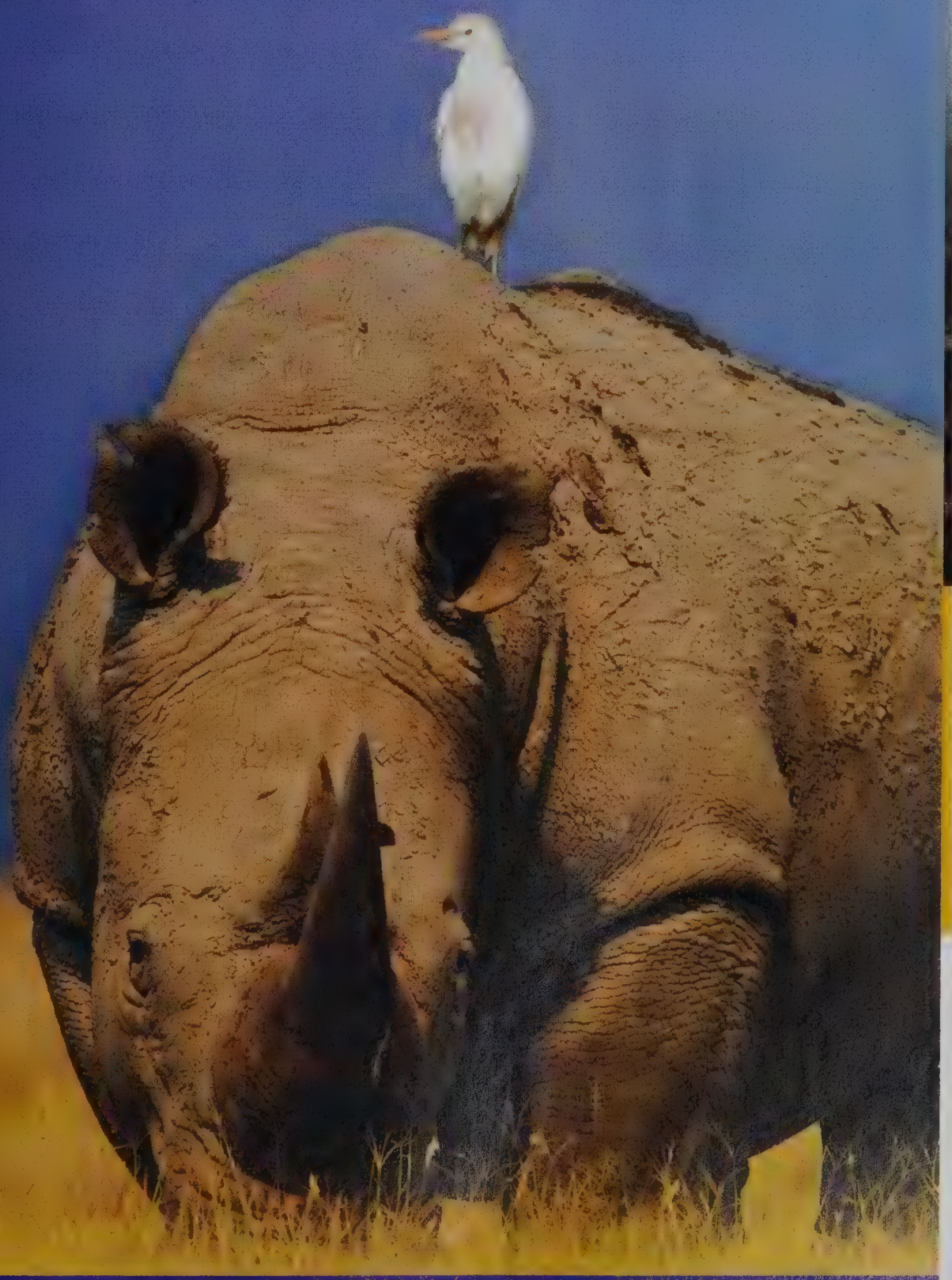
- Simple operation with minimal power requirements
- High reliability and optimal performance
- Most widely fielded CREW system
- Innovation worthy of the Army's Top 10 Greatest Inventions Award

So when you're in the field, your best protection is right there with you.

To find out more, visit **www.srcinc.com/CREWDuke.**

CREW Duke

Redefining possible.



SRC

Defense. Environment. Intelligence.

© 2012 SRC, Inc. All rights reserved.

GEN Odierno's 'Marching Orders'

Regardless of numbers, U.S. Army Chief of Staff GEN Raymond T. Odierno outlined the characteristics of the Army's future force in his "Marching Orders" document, which was released in January. The future force will have five characteristics:

■ **"Depth and Versatility."** GEN Odierno stated, "The Army provides depth to the nation by a trained and ready land force that includes a viable operational reserve. Reversibility and expansibility of the force also contribute to strategic depth." ("Reversibility and expansibility" mean that the Army will be able to reverse course on personnel reductions at any point and expand to larger size if operationally necessary for national defense.)

■ **"Adaptive and Innovative."** He stated that Army leaders and soldiers will need to "adapt their thinking, formations and employment techniques to the specific situation they face. This requires an adaptive and innovative mind, a willingness to accept prudent risk in unfamiliar or rapidly changing situations, and an ability to adjust based on continuous assessment." He said that language skills and cultural knowledge are important for success, adding, "So, too, are training, leader development and personnel policies aimed at fostering creativity at every level."

■ **"Flexible and Agile."** GEN Odierno stated, "To achieve strategic, operational and tactical success, we must be flexible in the face of adversity and agile in our responsiveness, able to dominate any operational environment against conventional and hybrid threats. Flexibility is achieved by preserving responsiveness to a broad range of missions including regular and irregular warfare, humanitarian assistance, security cooperation, and support to civil authorities. Effective mission command, collaborative planning and decentralized execution foster agility."

■ **"Integrated and Synchronized."** He stated that the Army must be able to operate as a "larger joint, interagency and frequently multinational effort."

■ **"Lethal and Discriminate."** GEN Odierno stated that "the capacity for physical destruction is fundamental to all other military capabilities" and that Army leaders must organize, equip and train for unmatched lethality under a wide range of conditions, adding, "The capability for the lawful, discriminate and expert application of lethal force builds the foundation for effective operations."

will be pursued; large, expensive, extended-duration land operations will be avoided; special operations forces will be the go-to organizations for continued worldwide combat operations against terrorist networks (Special operations forces will increase by about 10 percent under current plans); and there will be expanded military presence and mission areas in the Pacific, a region that the new strategy declared to be the renewed focus of American defense. The implication is that attention to the Pacific-Asia region is not in balance with the threats faced.

Nevertheless, the underlying message from defense leaders is that the United States will not let down its guard in other areas of the world while increasing commitments in the Pacific, but that all of it will be done in a different and more efficient manner, keeping with the realities of the current American economy and funding, which means leveraging technology and reducing personnel.

"As we look beyond the wars in Iraq and Afghanistan—and the end of long-term nation-building with large military footprints—we'll be able to ensure our security with smaller conventional ground forces," President Obama said during the Pentagon news conference announcing the strategy, adding, "We'll continue to get rid of outdated Cold War-era systems so that we can invest in the capabilities that we need for the future, including intelligence, surveillance and reconnaissance; counterterrorism; countering weapons of mass destruction; and the ability to operate in environments where adversaries try to deny us access."

President Obama said that he called for a comprehensive defense review "to clarify our strategic interests in a fast-changing world and to guide our defense priorities and spending over the coming decade because the size and the structure of our military and defense budgets have to be driven by a strategy, not the other way around."

In late January, Secretary of Defense Leon E. Panetta briefed reporters on the budget priorities and rationale contained in the FY 2013 defense budget request and said the Defense Department's FY 2013 base budget request is $525 billion, plus $88.4 billion for overseas contingency operations, adding that those numbers are down from FY 2012's $531 billion base and $115 billion for overseas contingencies and that the budget request implements $259 billion in savings over five years, as required by the Budget Control Act. Under current legislation, the defense budget must be reduced by $487 billion over 10 years.

The formal budget request will be followed by a report outlining the Defense Department's overarching direction called Joint Force 2020 and the connected "Army 2020" paper that will detail the U.S. Army's direction. It will create a post-Cold War Army in version 3.0. The first version was the result of downsizing and restructuring that followed the fall of the Soviet Union and with improvement served through Grenada, Panama and Desert Storm up to the 9/11 attacks. The 2.0 version followed 9/11 and is the result of nearly wholesale evolvement made during more than a decade of combat in

RESOURCEFUL.

In more ways than one.

The Cat® D7E with Electric Drive. Protecting the world's resources while maximizing your own is good for business, your people and the environment as a whole. The Cat D7E track-type tractor with electric drive maximizes efficiency and productivity while conserving our natural resources.

The D7E is designed to use less fuel, produce less noise and consume fewer resources over its long working life than any other track-type tractor in its class. The D7E is one more example of how you can count on Cat to be a resourceful partner for your business and the world.

For more information on how Caterpillar Supports our Military, contact:

Jan Kirkton
309.675.4405
Kirkton_Janet_L@cat.com

Lorie Huff
309.494.3430
Huff_Lorie_L@Cat.com

Chad Bixby
309.494.5621
Bixby_Chad@cat.com

www.catdfp.com

CAT®

© 2012 Caterpillar | All Rights Reserved | CAT, CATERPILLAR, their respective logos, "Caterpillar Yellow" and the POWER EDGE trade dress, as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.

Afghanistan and Iraq. The 3.0 version will be the post-Iraq/Afghanistan model, and that model was couched by the strategy as one that is more nimble and flexible and which will seek to retain a large, combat-experienced cadre of the current mid-grade NCOs and officers—leadership that retains the capability to expand the force if necessary.

GEN Odierno said that the Army's reserve components must be strengthened and modernized to provide the time necessary to expand the active Army, if required, and to support contingency operations.

time being, and the Air Force will proceed with development and acquisition of the new F-35 fighter/attack plane (albeit at a slower pace) and, possibly, a new long-range bomber. In addition, the Marine Corps will proceed with development of its version of the F-35.

Stand-off weapons, autonomous or remotely piloted, will continue growing in numbers and sophistication. The unmanned aerial vehicle (UAV) fleet among all services will grow by about 30 percent. The Global Hawk Block 30 program will be eliminated, but Block 40 development will proceed.

Army Chief of Staff GEN Raymond T. Odierno meets the U.S. Army Pacific staff at Fort Shafter, Hawaii, in January.

U.S. Army/SSG Teddy Wade

"Our National Guard and Reserves are truly an operational reserve, giving us increased depth and capacity," the Chief of Staff said.

Concerning the cuts, Secretary Panetta noted that the United States "must avoid hollowing out the force" and said that "a smaller, ready and well-equipped military is much more preferable to a larger, ill-prepared force that has been arbitrarily cut across the board."

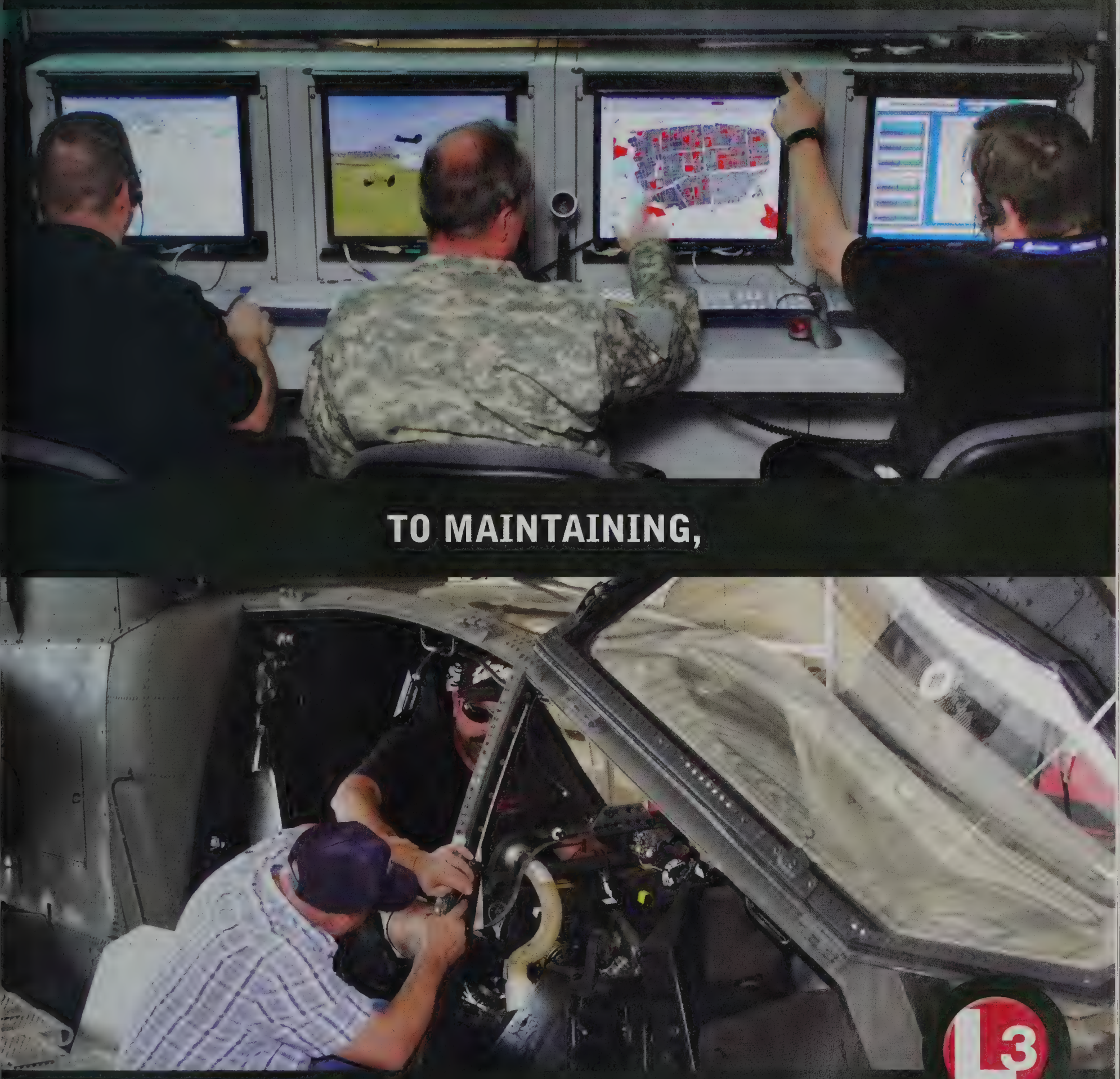
The Sergeant Major of the Army, Raymond F. Chandler III, has traveled to bases around the world to tell soldiers to be ready for personnel cuts, that standards will be tightened and that only the best soldiers will be allowed to stay in the Army. He also said that some soldiers may have to change military occupation specialties to stay in the ranks. SMA Chandler told soldiers to be individually prepared for force reductions.

While ground force cuts will be made, the Navy will retain the present configuration of 11 carrier groups for the

Although U.S. forces in Afghanistan were unwaveringly supported under the strategy, a 2014 terminus point for major operations is one of its budgetary and force structure-setting cornerstones—viewing the end of operations in Iraq and planned reduction of operations in Afghanistan as depreciating cost outlays and declining troop requirements that help balance the bottom line.

A certainty is that Army combat forces in Europe will be affected almost immediately as Secretary Panetta said that two Army brigade combat teams (BCTs) currently based in Europe will be cut, possibly starting as soon as October, and will be replaced by unit training rotations, leaving two BCTs forward-based in Europe along with their family members. One BCT will be eliminated in FY 2013, and the other in FY 2014. Rotations eliminate costs associated with permanent duty station expenses for family members.

FROM TRAINING



TO MAINTAINING,

WE'RE THERE.

L-3 understands that a successful mission relies on prepared warfighters and platforms that perform at op-tempo. We have advanced technology to train pilots using state-of-the-art, high-definition simulators, as well as the maintenance and modernization expertise to keep fixed- or rotary-wing aircraft optimized for any challenge. When it comes to mission readiness at the highest level, L-3 is there.

L-3com.com

Defense leaders noted, however, that the U.S. commitment to Europe and NATO will remain strong.

"A long history of close political and military cooperation with our European allies and partners will be critical to addressing the challenges of the 21st century," Secretary Panetta said. "The U.S. military's force posture in Europe will, of necessity, continue to adapt and evolve to meet new challenges and opportunities, particularly in light of the security needs of the continent relative to the emerging strategic priorities that we face elsewhere. We are committed to sustaining a presence that will meet our Article 5 commitments [and] deter aggression, and the U.S. military will work closely with our allies to allow for the kinds of coalition operations that NATO has undertaken in Libya and Afghanistan," he added.

GEN Dempsey said, "Our strategic challenges are shifting, and we have to pay attention to those shifts. But what we do will always be built on the strong foundation of our traditional strategic partnerships, and NATO is chief among them."

Funding for training soldiers and European allies at U.S. Army facilities in Germany is expected to grow in the near future, and U.S. bases in Europe remain a key component in ongoing logistics operations to supply U.S. and NATO forces in Afghanistan.

U.S. officials also noted that the United States will not let down its guard in the Mideast and Southwest Asia, keeping with continued volatility in those regions, but they said the United States will boost its strategic defense posture in the Pacific.

"As we move towards this new joint force, we are also rebalancing our global posture and presence, emphasizing the Pacific and the Middle East," Secretary Panetta said. "These are the areas where we see the greatest challenges for the future. The U.S. military will increase its institutional weight and focus on enhanced presence, power projection and deterrence in Asia-Pacific."

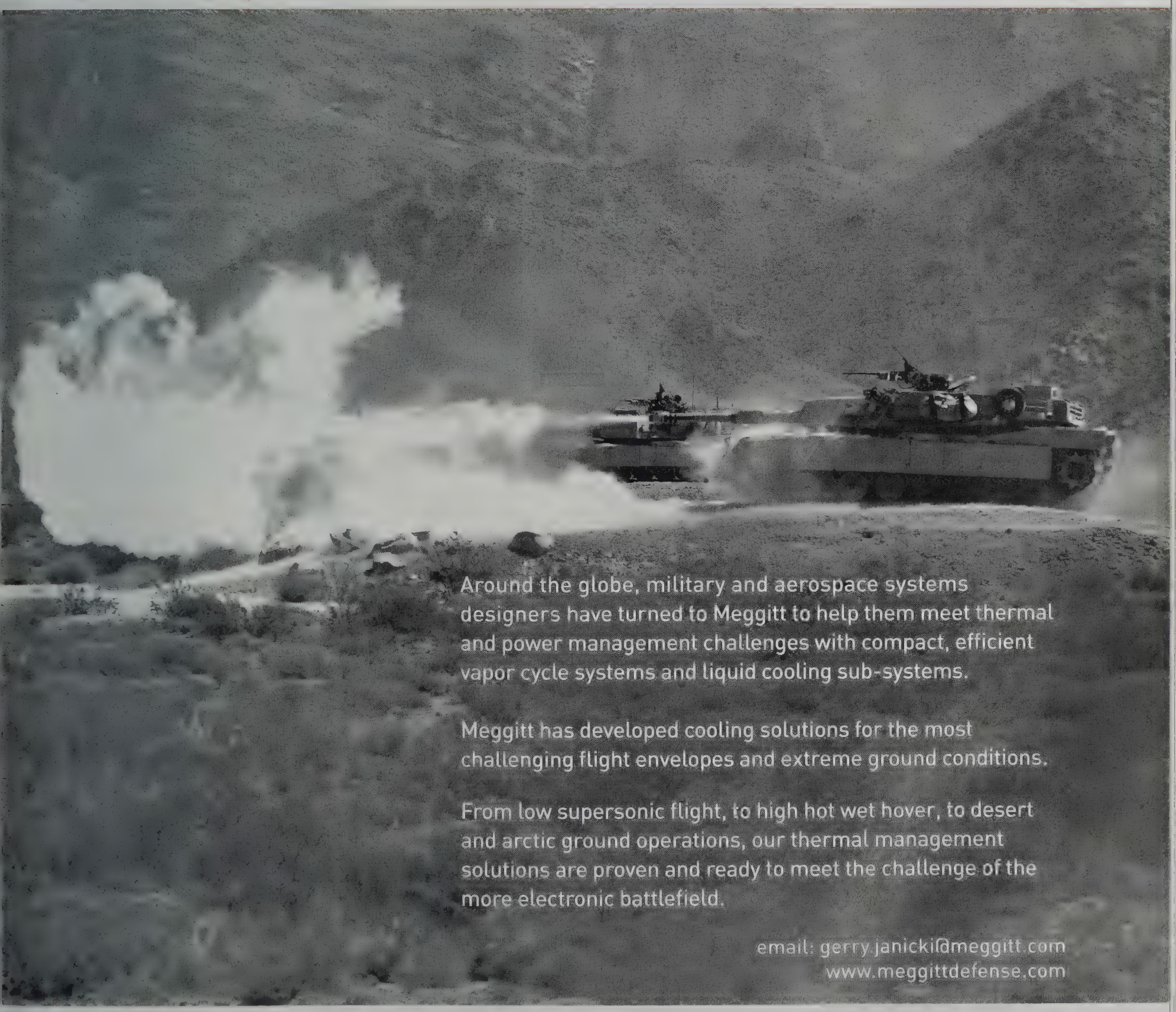
In mid-January, GEN Odierno visited troops stationed in Hawaii and held talks with senior leaders of the U.S. Pacific Command (PACOM) and U.S. Army Pacific to discuss the Army's future role in the Pacific.

GEN Odierno said, "It was important that I come here and have initial discussions so we start thinking about how we will use the Army forces here in Hawaii and all Army forces ... to support our objectives in the Pacific region."

He added, "I think the number of soldiers assigned to the Pacific will be generally the same. You won't see a significant decrease here. The additional thing you'll see is that as we reduce our commitment now that we are out of Iraq and reducing our structure in Afghanistan, ... more of the CONUS [continental United States]-based force ... will be available to conduct operations in support of any combatant commanders, but also to support what is going on here in the Pacific."

GEN Odierno said that continental U.S. Army forces will be aligned with forces from the Pacific region, which

Our thermal management systems improve performance, reliability and mission



Around the globe, military and aerospace systems designers have turned to Meggitt to help them meet thermal and power management challenges with compact, efficient vapor cycle systems and liquid cooling sub-systems.

Meggitt has developed cooling solutions for the most challenging flight envelopes and extreme ground conditions.

From low supersonic flight, to high hot wet hover, to desert and arctic ground operations, our thermal management solutions are proven and ready to meet the challenge of the more electronic battlefield.

email: gerry.janicki@meggitt.com
www.meggittdefense.com

MEGGiTT
smart engineering for
extreme environments

PACOM could use to meet requirements that develop in the region, including training exercises, military-to-military engagements or rotating Army company units to train with forces from Pacific countries at the company level.

The underpinning for the Pacific strategy reorientation was initiated by a study started by an Air Force and Navy task force committee more than two years ago that resulted in a concept called AirSea Battle, akin to the AirLand Battle doctrine applied decades ago. AirSea Battle outlines a doctrine centered largely on stand-off naval capabilities, enhanced surveillance capabilities and planning for forward-basing additional air capabilities on a situational basis to counter threats in the Pacific, specifically increasingly modern Chinese military threats. The Army was given a seat on the committee very late in the game.

The foundation for AirSea Battle focuses on the current multilayered threat to established trade routes by China and growing friction stemming from several territorial disputes that China has with neighboring countries, primarily Vietnam, islands that have potential for oil exploration and exploitation.

The region under AirSea Battle is not the broad, blue (and rather empty) Pacific Ocean that one might envision under an American strategy shift to a Pacific emphasis. Rather, the Pacific in the Pacific strategy encompasses the seas that shape a crescent around Eastern Asia and Southeast Asia, extending into the Indian Ocean and westward: the littoral seas from the Sea of Japan and Yellow Sea in the north, curving southward to the East and South China Seas and westward to the Gulf of Tonkin, Gulf of Thailand, Indian Ocean, Arabian Sea and onward into the Persian Gulf—the bodies of water that touch China and which China wants to touch to directly protect its domestic economic interests and extend its influence economically, diplomatically and militarily.

In terms of immediacy and importance, from China's viewpoint the apex is oil—unfettered access to it from the Saudi Arabian Peninsula and West African wellheads and securing its transportation to Chinese ports unimpeded by the West, and, by extension, the ability to impede any other nation's seagoing traffic through those routes if China should choose to do so, which is the most worrisome strategic threat in the West's viewpoint.

China's mammoth industrial/economic engine depends on oil imports. (China's domestic oil resources are minuscule.) Although China has oil and gas pipelines extending from Kazakhstan and Russia, most of its oil is transported by ocean tankers from exporting countries on the Saudi Arabian Peninsula and Western Africa. The strategic rub is that roughly 80 percent of the oil fueling South Korea, Taiwan, Japan and the Philippines (the larger U.S. allies in the Pacific region) travels the same eastbound sea lane—with a large chunk of the U.S. allies' trade exports headed in the westbound lane along with China's exports.

The nexus point of the trade route—by the unfortunate dictates of tectonic-plate-imposed geography—is a narrow body of water called the Strait of Malacca separating the Island of Sumatra (Indonesia) and the Malay Peninsula (the peninsular portion of Malaysia). Though two other, but less major, straits to its south feed some traffic, the Strait of Malacca is considered one of the most important shipping lanes in the world, effectively connecting the Indian Ocean with the Pacific Ocean. It is about 500 miles long and about 17 miles wide at its widest point, narrowing to approximately 1.5 miles as it nears Singapore, creating a strategic choke point.

Since World War II, the United States and its allies have been the de facto naval guarantors of free trade along the whole of the route from the Red Sea and Persian Gulf to the open Pacific.

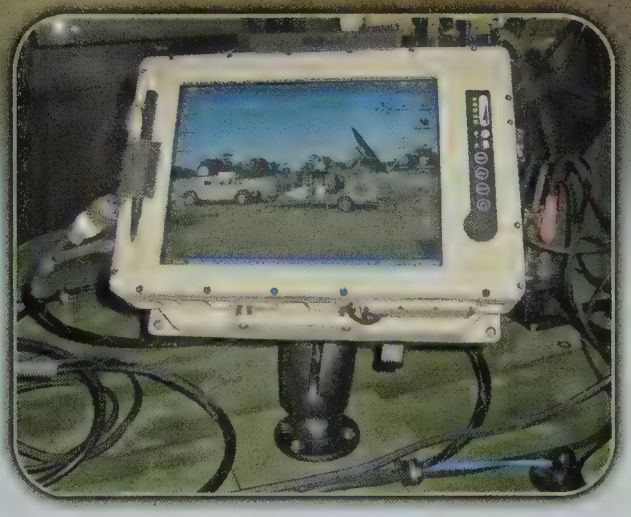
The Chinese have been working intensely at making gains in the region during the more than a decade that the United States has been militarily focused on Afghanistan, Iraq and other fronts in the post-9/11 conflict. During that time, China has set up what is called the String of Pearls—a chain of commercial/military bases astride the trade route. From west to east, China has negotiated leases for commercial/naval/surveillance bases in Kenya, Pakistan, Sri Lanka, Bangladesh and Burma. It also has established major bases on Woody Island and Hainan Island in the South China Sea.

The whole of China's armed forces has engaged in a broad program of expansion and modernization in the past decade. As it affects China's abilities to extend military influence into the littoral Pacific seas and beyond, China has embarked on a huge naval shipbuilding program, including an aircraft carrier, while enlarging and modernizing its air and missile capabilities and significantly extending its attack reach into the sea lanes. China also has developed an array of electronic and cyber disruption measures radiating from the mainland and air and naval platforms that can blanket the region (in addition to the worldwide electronic and cyber threats posed by China, which also require countermeasures).

Most of all, U.S. strategy is aimed at maintaining the United States' global position as a preeminent world power—diplomatically, militarily and economically.

"We're a global power, and we have to be able to conduct military activities and operations across the full spectrum," GEN Dempsey said, adding, "Nobody has said, and nowhere in the [strategic] document does it say, we're not going to fight land wars. It doesn't say we're never going to do stability operations. It does say explicitly we have to be capable of conducting operations across the full spectrum. It's a matter of scope and scale, time, risk, reversibility, and those are the issues that we continue to work as we work on this living document. But it would be really a mistake to suggest that—or for you to walk away with the impression, or anyone to walk away with the impression—that we're going to 'niche ourselves' to some point on the spectrum and declare ourselves a global power." ★

RAM® MILITARY MOUNTS



Contractors who trust RAM ®

NORTHROP GRUMMAN

Raytheon

LOCKHEED MARTIN

GENERAL DYNAMICS

Rockwell Collins

TRW

DRS TECHNOLOGIES

THE RAM® MOUNT ADVANTAGE

- RAM® Shock Absorbing Mounts Protect Electronics for Improved Reliability
- Field Proven for Over 15 Years
- Made in the USA
- Lifetime Warranty

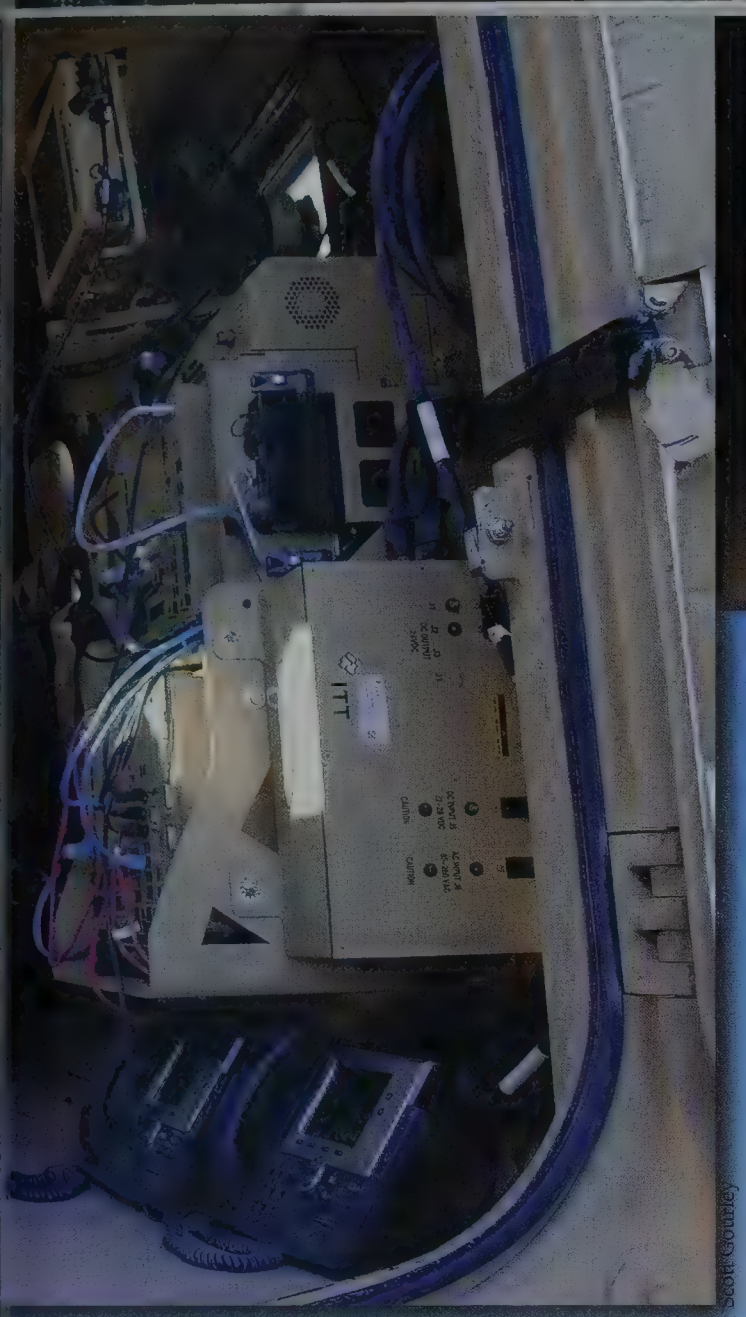
WWW.MILITARYMOUNT.COM

National Products, Inc. I Address: 8410 Dallas Ave. S., Seattle, WA 98108
Phone: (206) 763-8361 I Fax: (206) 763-9615
Website: www.ram-mount.com I Email: sales@ram-mount.com

COMPANY COMMAND POST

The Caiman mine resistant ambush protected tent-based company command post—a Caiman vehicle equipped with mission command capabilities for use on the move or, with the supplied tent, at a halt—was reviewed last fall at Network Integration Evaluation (NIE) 12.1 at White Sands Missile Range, N.M.

Several company command post variants, which allow company commanders to use mission command applications previously available only at the battalion level and above, were evaluated at NIE 12.1.



Scott Gourley

INITIATIVE

U.S. Army/Claire Schwerin

By Scott R. Gourley

It seems pretty basic: A command post is an organizational hub where a commander and his primary staff will normally execute current operations and plan future operations.

There has been a change, however, in the nature of current operations and the increasing responsibilities assigned to lower-echelon units that have not been formally equipped or staffed for the command aspects of those responsibilities.

"In the old 'conventional' days it was like an upside-down pyramid, where the guy at the bottom knew less about what was happening than the guy at the top," explained LTC Matthew Fath, commander, 1st Battalion, 35th Armored Regiment, 2nd Brigade Combat Team, 1st Armored Division. "He fought for his own reconnaissance, for example, while the guy on the top got all of the JSTARS [Joint Surveillance Target Attack Radar System] feeds. There was no good way to get that information down to the company commander, but in a

U.S. Army

A company command post was set up inside the Army's Network Modernization display at the 2011 Association of the U.S. Army Annual Meeting and Exposition in Washington, D.C., last October.

counterinsurgency that pyramid is flipped. The guy at the bottom knows more than anybody else above him. Therefore, his command post has to be responsive to his needs. So there is a lot of intelligence analysis and 'databasing' that happens at the company level that needs to be resourced in a company command post.

"In a counterinsurgency fight the company command post provides an absolutely critical function," he said. "In a counterinsurgency fight I refer to the company commander as the Prince of Counterinsurgency. In a counterinsurgency environment everyone else exists to support the company commander. He is the number-one guy who has daily contact with the population in his battlespace. So a lot of the functions that a battalion tactical operations center and higher formerly performed have now filtered down to the company commander. That mainly has to do with intelligence. A company commander knows his area of operations in a counterinsurgency better than anybody else in that theater because that's what we hold him responsible for knowing, but for years and years we didn't [provide the] resources for him to do that function."

In recognition of that gap, the Army has undertaken a new company command post initiative process, which features extensive cooperation among organizations like the LandWarNet division in G-3/5/7 at Headquarters, Department of the Army; the Program Executive Office for Command, Control, Communications-Tactical (PEO C3T); and units on the ground at the semiannual Network Integration Evaluation (NIE) events.

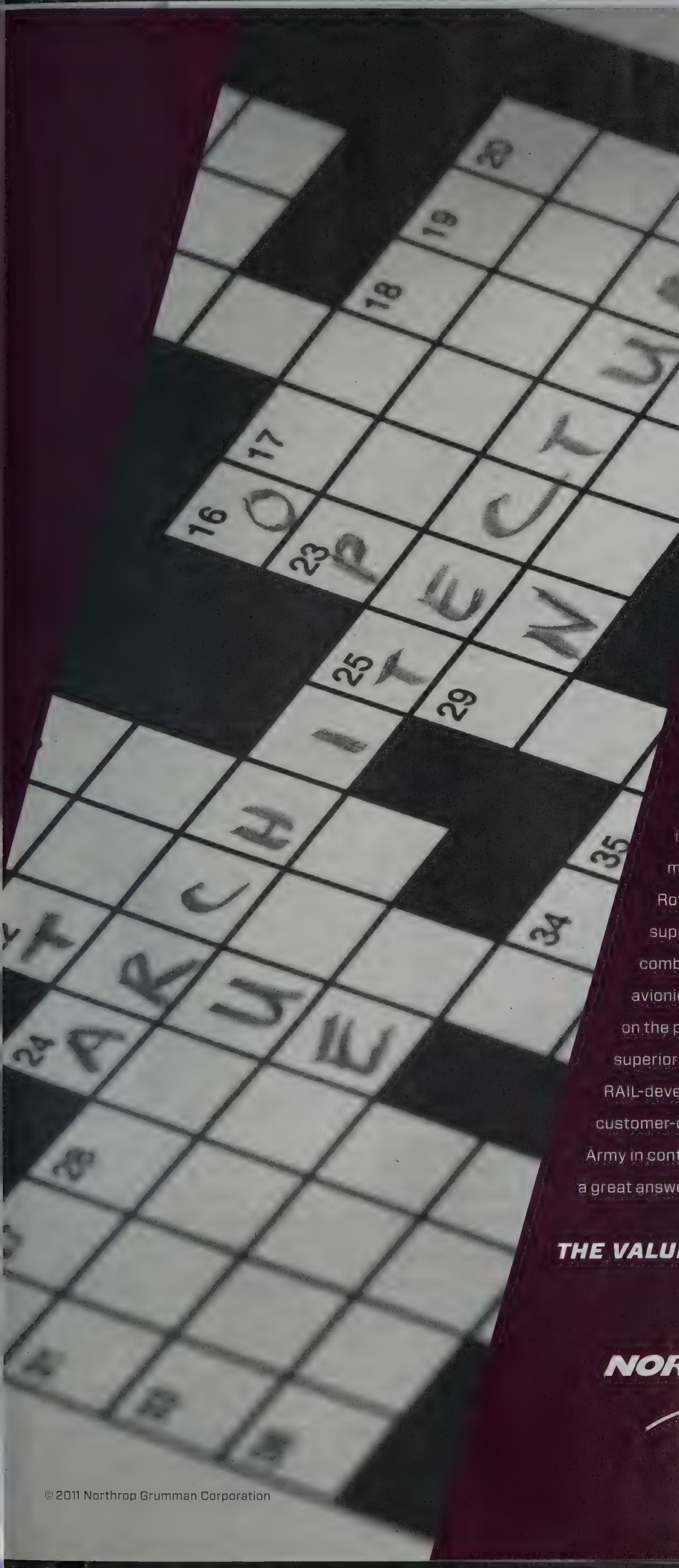
According to representatives in the office of U.S. Army product manager for Command Post Systems & Integration (CPS&I), assigned to PEO C3T, the company command post initiative began to take shape a couple of years ago when theater lessons learned included the fact that forward-deployed company commanders lacked organic capabilities to reach back to battalion to keep them informed and to enhance their own understanding of the battlespace.

"Because the commander has to have communications with his superiors at the battalion and the brigade levels, and because companies operate more decentralized in the theater of operations, that company commander has to be more situationally aware," explained LTC Carl J. Hollister, product manager for CPS&I. "The way we provide that situational awareness is through mission command capabilities, [which] not only enable that company commander's situational awareness but also keep him tied to his superiors through data or voice communications as integral parts of the network."

The initiative emerged with a set of directed requirements that included: Transmit and receive voice, data and imagery (line of sight and beyond line of sight); automatically transmit own position location information (PLI) and receive and display autotransmitted friendly PLI; collaborate via voice, chat and whiteboard with higher, adjacent and subordinate units; display and manipulate the common operational picture; access unclassified, classified and coalition networks; incorporate rehearsal and training

---

Scott R. Gourley, a freelance writer, is a contributing editor to ARMY.



THE VALUE OF SOLVING COST AND CAPABILITY QUESTIONS.

Meeting the U.S. Army's needs for future integrated-cockpit capability is critical to mission success. The Northrop Grumman Rotorcraft Avionics Innovation Lab (RAIL) supports the rapid and agile development of combat-proven advanced cockpits with integrated avionics architectures. The RAIL test bed is built on the principle of truly open architecture to deliver superior combat effectiveness and cost efficiency. RAIL-developed cockpits are scalable, receptive to customer-defined apps, and interoperable — putting the Army in control of the future. Northrop Grumman RAIL: a great answer to multiple questions.

THE VALUE OF PERFORMANCE.

NORTHROP GRUMMAN

www.northropgrumman.com/rail

© 2011 Northrop Grumman Corporation

AUSA
Membership Benefits

Bank of America, N.A.:
AUSA Bank Card
Start receiving great rewards and show your support for AUSA. Call 866-438-6262.

Institute of Land Warfare:
ILW offers writing programs; conducts conferences and symposia; publishes essays, Defense Reports, newsletters; and provides research on defense issues. Call 800-336-4570, ext. 4630 for details.

AUSA Mastercare Group Insurance Plans:
- Active Duty & Retiree TRICARE Supplement
- Accidental Death and Dismemberment Plan
- 10-Year Level Term Life Insurance Plan
- Group Term Life Insurance Plan
- Short-Term Recovery Plan
- Long Term Care Plan

Call 800-882-5707 for more information.

Dental and Vision Discount Plans:
Discounts offered to AUSA members on dental services and vision exams.

This plan is not available in the states of MT and VT.

Emergency Assistance Plus:
If you or a family member gets injured or sick while on travel this plan will provide medical assistance, bring a medical specialist or loved one to your side and much more. Call 888-633-6450 for more information.

Government Vacation Rewards:
AUSA now offers its members discounts on cruises, resorts and tour providers. 866-871-9181

GEICO Insurance – Auto, Home, Condo/Renters, and Boat:
In states where available, a special member discount may apply. Call 800-861-8380.

Apple Member Purchase Program:
Apple Computers offers AUSA members a substantial savings on its computers. Call 800-MY-APPLE and mention you are a member of AUSA.

Book Program:
Members receive discounts on selected military books.

Army Times/Federal Times:
Subscription discounts on Army Times/Federal Times. Call 800-368-5718.

Dell Member Purchase Program:
AUSA members can now receive discounts on Dell PCs.

AUSA Career Center:
AUSA members can now post their resumes and employers can advertise any new openings they have. Visit our Web site and go to the Resources drop-down, then Career Center.

University of Maryland University College (UMUC):
University of Maryland University College (UMUC) is pleased to offer undergraduate and graduate study programs to AUSA members worldwide. For some program participants, a discounted tuition rate will apply.

Armed Forces Services Corporation:
AFSC guides you through the details on military entitlements for your retirement and survivor planning/assistance for your spouse. Call or e-mail: 888-237-2872, info@AFSC-USA.com.

Choice Hotels International®:
AUSA members can receive discounts on hotel rooms at the following hotels.

- Comfort Inn®
- Comfort Suites®
- Quality®
- Sleep Inn®
- Clarion®
- Cambria Suites®
- MainStay Suites®
- Suburban Extended Stay Hotel®
- Econo Lodge®
- Rodeway Inn®

Call 800-258-2847 and use the code 00800700.

Car Rental Program:
Use the reservation codes on the back of your membership card and save at:

• AVIS	800-331-1441	• Hertz	800-654-6511
• Budget	800-455-2848	• National	800-Car-Rent
• Alamo	800-354-2322 *(rental for under age 25 available)*		

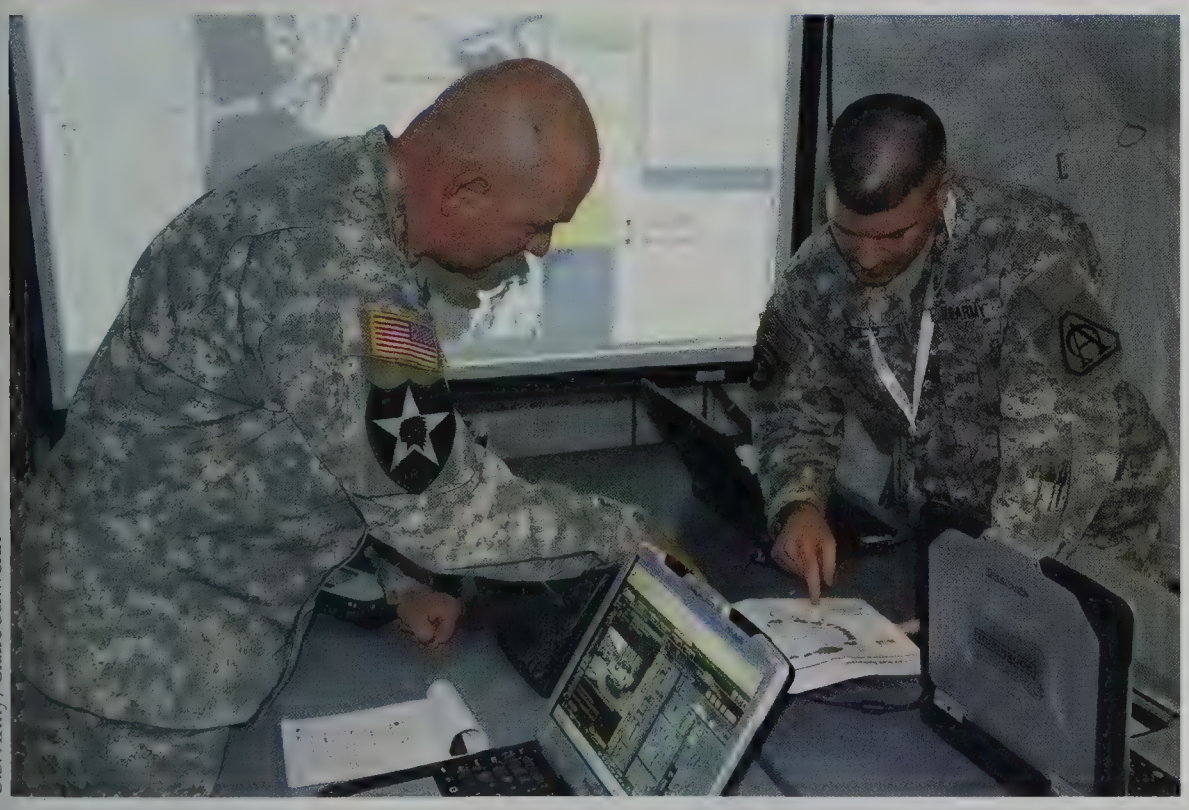
Publications:
- *ARMY* Magazine every month, including the October *ARMY Green Book*.
- *AUSA NEWS* every month.

Member discounts and services are subject to change.

For more detailed information visit Members Only Benefits and Services at www.ausa.org.

AUSA Member Support Call Center 855-246-6269 or 703-841-4300, press #2

U.S. Army



U.S. Army/Claire Schwerin

Above, a company command post prototype was displayed in the Army's Network Modernization booth at the 2011 LandWarNet Conference in Tampa, Fla. Featuring technologies shown in the first NIE last summer, the booth demonstrated how the Army is using networked capability to empower units down to the company and platoon level. Left, inside a prototype company command post at the 2011 LandWarNet Conference, MG John McGee and LTC Jon Ellis discuss its capabilities, among them sending and receiving text messages and emails, utilizing ground tactical data reporting systems and collaborative environments such as Command Post of the Future, and planning fire support missions with the Advanced Field Artillery Tactical Data System.

tools; conduct all source intelligence analysis and operations; and plan and execute fires.

"At company you have a command post and at battalion you have a tactical operations center," noted LTC Fath, whose battalion has been the focus of early company command post field evaluations during the last two NIEs. "It's not a new capability, but one of the things we've been trying to figure out is what should become the Army's baseline—on both equipment and on personnel—in a company command post.

"Everybody has command post equipment and personnel according to their table of organization and equipment," he said. "What we have learned during the past 10 years at war is that we do a lot of ad hoc stuff to build the company command post to where it provides something to a company commander. Most of that we have built, either in Iraq or Afghanistan, from theater-provided equipment, which is not on your table of organization and equipment.

"So one of the things we have been tasked to do is establish what we think should be the command post with soldiers, leaders and equipment," he added. "So it's not new. What we are really trying to do is take lessons learned from the past 10 years and get them into Army doctrine, then into Army equipment and personnel manning documents for the company command post."

"We are trying to 'right-size' that," said LTC Hollister. "That's the purpose of our initiative participation in the NIE process. We don't want to give the companies too

U.S. Army

The role of company command posts in mission command on the move and the extension of the network to the individual soldier were key priorities evaluated during NIE 12.1.

much capability, because then it becomes difficult to sort through all the information that is being provided to them ... in terms of information and the transport mechanisms. ... It also includes mission command enablers—software applications that provide different levels of knowledge management and information management."

LTC Fath offered the company intelligence support team as an example of one of the personnel manning issues being explored.

"Right now in our table of organization and equipment—that just changed last October—every company is authorized an intel sergeant and an intel soldier at the company level to do intelligence work, and I will tell you that it doesn't matter if you are in a counterinsurgency or wide-area security or combined arms maneuver. You still need those intelligence guys at the company level," he said.

One important aspect has been staffing, "whether we need two operations sergeants or just one to run the ops side of the house. Another critical point we are finding as we evaluate the network involves signal personnel," LTC Fath explained. "Right now you are authorized one signal sergeant at the company level and he's a 25 'Uniform,' which is an FM [frequency modulation] commo guy. Now you are asking him to do things closer to what a 25 'Bravo'—a network guy—does. Then if you get an augmentation or some type of satellite comms for your data path now you are talking about a 25 'Quebec.' So we have to take a look at the Signal MOSs [military occupational specialties] and see what that soldier either needs to be trained to do or possibly assign additional personnel in the company command post to run all those systems."

In parallel with the company command post, the NIE has also been exploring the mandates of mission (battle) command on the move.

"One of the things we are trying to do is bridge those two concepts," LTC Fath observed. "Ideally it should be modular, based on the tempo of the fight. If you're in combined arms maneuver and you have a high-tempo operation, the commander is fighting from his vehicle or he is on the ground if he's a light infantryman, but for my battalion we were an MRAP-based [mine resistant ambush protected], motorized, combined arms battalion. So the company commanders fought either on the ground or in their M-ATV [MRAP All-Terrain Vehicle]—most of the time on the ground."

During the most recent NIE, company commanders in LTC Fath's battalion also pooled a number of new Caiman MRAP command post prototypes, resulting in both stationary (tent) and mobile (Caiman) mission command assets.

"What we have looked at—and taken to the Mission Command Center of Excellence—is that ideally if you were in a high-tempo, combined-arms-maneuver fight, your command post would be that Caiman command post—at least the way my battalion was based," LTC Fath explained. "At certain times the tempo slows down—let's say you move from combined arms maneuver to wide-area security—and that's when a tent-based command post comes in. Then you just basically boot the Caiman into the back of a tent-based command post and remote all the systems out of the Caiman and into the command post, and obviously you may have to have a generator and ECU [environmental control unit]. So for us it was a DRASH [deployable rapid assembly shelter] tent, an ECU, plus the Caiman command post vehicle that composed the company command post."

The Caiman command post prototypes actually emerged before NIE 11.2 in spring 2011, when LTC Fath and some of his company commanders met with Jerry Tyree, who had a System of Systems Integration Directorate rapid prototype facility at White Sands, N.M.

"You had the company commanders sitting with the engineers and actually designing the Caiman command post with the systems in there," he said. "And we improved upon that between NIEs 11.2 and 12.1. That was a great methodology of putting the commanders—the guys who need it and know what they want in there—with the systems engineers building and designing the Caiman."

When asked about how a company command post changes things from his battalion command perspective,

LIGHT ON WEIGHT.
HEAVY ON PROTECTION.

The Lockheed Martin Joint Light Tactical Vehicle is road-ready and blast-proven. Our vehicles have been through a rigorous boot camp of mountainous and desert terrain. They've driven over 160,000 combined miles. And while JLTV is heavy on force protection, Army and Marine helicopter lift tests also show it is light and transportable. Its dual performance for both the Army and the Marines makes it the most affordable choice for any mission. Equipped with Lockheed Martin's systems integration experience and BAE Systems' innovative protection, we're making sure JLTV is secure, reliable and ready to go.

THE LOCKHEED MARTIN TEAM

LOCKHEED MARTIN BAE SYSTEMS TACTICAL WHEELED VEHICLES

JLTV

www.lockheedmartin.com/jltv

U.S. Army

Three primary variants of the company command post were evaluated at NIE 12.1. NIE 12.2 will evaluate two new variants of the command post.

LTC Fath said, "When we get the transport layers and data paths right, when we get the data paths working reliably and effectively, think of the power of being able to send data from a tactical operations center—or my TAC, which is a Caiman command post—down to a company command post. That's powerful stuff, because before that we were operating off of FM. We were the operating voice, and we were trying to 'paint a picture' to a guy over FM. That's an art. It takes experience to be able to use voice to paint a visual picture in the commander's mind of what is happening."

Referring to his own previous experience as an observer controller (OC) at the National Training Center, he recalled, "Most wrong decisions were made not because commanders were ignorant. It was that they made the best decision based on the information that they had at the time. That will never change. But now think about the company commander being able to get better information, better intelligence and having the ability for an intel guy to do that analysis at his level."

Looking toward the upcoming NIE 12.2, LTC Fath said, "By the end of January we have to send up what we think the command posts are going to look like for 12.2. From my understanding they are then going to try to baseline a couple to really see if that's the right answer. That's kind of the goal for 12.2, to have the baseline company command posts and then provide more feedback at the end of that NIE."

LTC Fath offered two takeaway points on the process.

"One is an overall observation of what the 2/1 AD is doing and what the Iron Knights [1-35 Armor] are doing right now," he began. "And the first thing I would observe is that this is really nothing new to the U.S. Army. If you look at the years between World War I and World War II, at Fort Knox, Ky., they had the Experimental Mech[anized] Force where they were trying to understand not only the equipment but the warfighting of a motorized/mechanized force. During Vietnam you had LTC Hal Moore's Air Cav concept that he was testing at Fort Benning, Ga., and then they took that unit to war in Vietnam. It's kind of the same concept at NIE, except that we're focused on things like the network; we're focused on company command post; we're focused on mission command on the move; and we are starting to connect to the individual soldier—through concepts like Connecting Soldiers to Digital Applications. We're trying to push a lot of capabilities from the battalion [tactical operations center] down to the company command post and then to push some of those capabilities—not all but some of them—down to the individual soldier on the ground."

He continued, "The second piece of that is what a great job the soldiers and leaders of our battalion and our brigade are doing. We fight against an adaptable, thinking enemy, and our soldiers are giving really great, detailed and candid feedback. They tell it like it is, and it is a continuous source of pride when you sit in the after action reviews and hear them talk, not only about the tactical issues, but also: 'Here's what the system is supposed to do, here is what it actually did and here is how I think the system should be fixed in order to give it the capabilities I need it to have.' As I tell the battalion: 'This battalion succeeds from the hard work of everyone from private to lieutenant colonel.' They do an absolutely great job.

"The Army is trying to enable mission success," summarized LTC Hollister. "We don't add technologies to the battlefield unless they are going to provide us with a tactical advantage and a technology advantage over our adversaries. We have to right-size the software and the hardware that go into a company command post in order to do that, but at the end of the day it's about mission success."

He concluded, "The NIE is a very special evaluation in that we have very focused soldiers and leaders who are giving us the best feedback possible without placing soldiers in harm's way. It's a great training platform for the Army, and it's a great evaluation platform for the Army." ★

MULTIPLE PLATFORMS
ONE LEADER

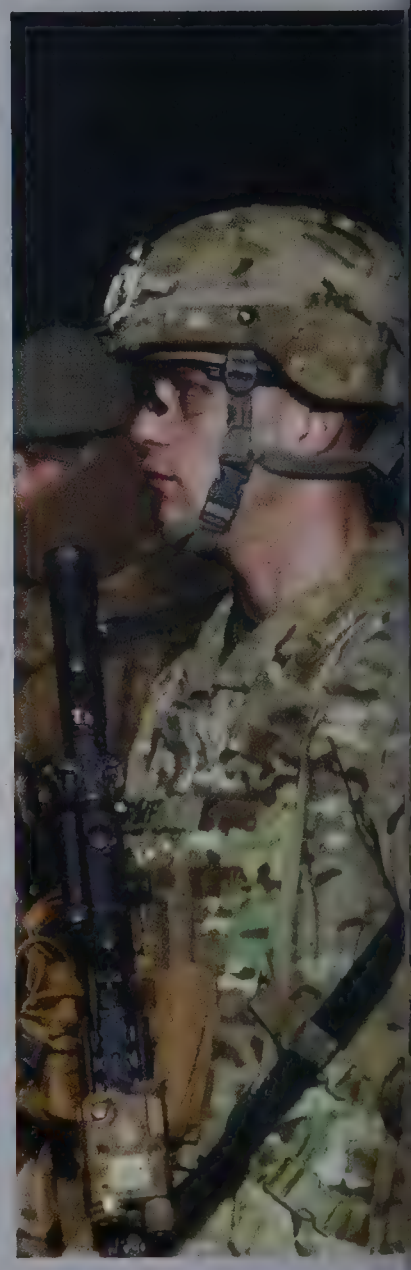
For more than 50 years, governments and militaries around the world have chosen Gulfstream aircraft to support their requirements for the same reasons so many corporations and business professionals have: unsurpassed speed, range, reliability and product support. When faced with the most demanding missions, Gulfstream is the preferred choice.

BUDDY SAMS 1.703.276.9500 | GULFSTREAM.COM/SPECIALMISSIONS

Gulfstream®
A GENERAL DYNAMICS COMPANY

Photographs: U.S. Army/ SGT Michael J. MacLeod

Army Paratroopers



Top left, paratroopers assigned to the 82nd Airborne Division's 1st Brigade Combat Team prepare to clear a building during an exercise at the Joint Readiness Training Center at Fort Polk, La. Top right, an Army trainer and two paratroopers use a smokescreen during a live-fire exercise to shield their positions. Above, before the live-fire exercise, trainers instruct the paratroopers as they sight their machine guns.

Above, an OH-58 Kiowa helicopter fires its .50-caliber machine gun during a strafing run on a mock enemy compound during the exercise. Below, before commencing the live-fire exercise, paratroopers gather to be briefed about the mission.

Train at JRTC

For two days in January, paratroopers assigned to the 82nd Airborne Division's 1st Brigade Combat Team participated in a training exercise at the Joint Readiness Training Center at Fort Polk, La. Their mission during the live-fire exercise was to assault a mock enemy compound and clear the buildings of threats.

Army trainers assisted the paratroopers before the exercise, coaching them as they practiced skills they would later use, such as sighting their machine guns. Instructors continued to accompany the warfighters during the mission, coaching and conferring with them when necessary.

To commence the actual exercise, the paratroopers gathered for a mission brief. They then entered the mock enemy compound, employing valuable combat techniques, such as creating smokescreens to shield their positions from the enemy.

Once inside the compound, clearing the buildings required a team effort. The paratroopers practiced assembling into stack formations in which

Right, paratroopers assemble into a stack formation in order to clear a building of threats in the mock enemy compound. Below, an instructor offers guidance to a paratrooper during the exercise.

each soldier is responsible for clearing threats from a different direction. After clearing a room, paratroopers pulled security on the corners of the building as they prepared to move to their next target.

In addition to room clearing, the exercise incorporated airborne attacks and medical evacuations. An OH-58 Kiowa conducted a strafing run on the compound, firing its .50-caliber machine gun at the enemy targets. The paratroopers later evacuated a simulated medical casualty to another helicopter.

Once the exercise was completed, the participants received critiques, allowing them to reflect on their performances. ★

Right, on the morning of the exercise, paratroopers draw their ammunition. Below, after clearing a building with his team in the mock enemy compound, a paratrooper pulls security.

CompanyCommand

Building Combat-Ready Teams

To: Company Commanders
From: Company Commanders

Lessons from Task Force Duke in Afghanistan

Company commanders from the nine battalions that composed Task Force Duke (3rd Brigade Combat Team, 1st Infantry Division) in the summer of 2011 have shared their hard-earned knowledge and experiences in a new *Afghan Commander AAR Book*. Task Force Duke waged a counterinsurgency (COIN) campaign in the eastern Afghanistan provinces of Khost, Paktya and Ghazni from January to December 2011. Despite their high operational tempo, 43 commanders made time during their deployment to share what they were learning with the company commanders who would follow in their footsteps. This month, we share excerpts from some of the contributors.

CPT Bernard Gardner

C/1-26 Infantry

COP Bowri Tanah, Khost Province

Defining Unit Experience

The toughest situation for the company occurred on 2 September 2011 when two platoons and my TAC faced a complex attack when conducting a joint raid to capture a high-value individual in a congested urban area. A group of children and teenagers had moved close to our inner cordon, and one teenager threw a grenade that exploded 10 feet from me and some of the Soldiers. Five seconds later, another local-national kid ran near one of the vehicles on the outer cordon and threw a grenade into one of the gunner's turrets, and then we received small-arms fire from a cornfield 300 meters away. Six U.S. personnel were wounded, including me, as well as two Afghan border police. My body immediately went into shock after 10 pieces of shrapnel tore into my legs, butt, side and shoulder. There was also one PSG wounded who required urgent evacuation due to blood loss.

This attack removed two key leaders within my company, forcing my company executive officer to assume command back at the combat outpost and one platoon leader to assume command of the company TAC and the two platoons on the ground. A senior squad leader immediately stepped up to fill the role of the wounded PSG and began coordinating the CASEVAC/MEDEVAC operations. The junior leaders on site all had to step up and take charge, executing a counterattack that resulted in the capture of one grenade thrower, while simultaneously conducting CASEVAC/MEDEVAC operations. Both of my two platoon leaders on the ground had only one month of experience as platoon leaders, which put them in an awkward situation of who was senior. Just before I was MEDEVAC-ed, I placed in charge the platoon leader tasked at the decisive operation and ordered him to continue the pursuit and exploitation.

This event was a perfect scenario where a unit had to execute succession of command under fire with multiple platoons. It is important for all Soldiers to understand that they are literally a heartbeat away from taking over their supervisors' duties and responsibilities. Thankfully, there were no KIA and our succession of command was anticipated, understood and rehearsed prior to conducting the mission. The leaders executed flawlessly and maintained our battle rhythm until I resumed command several days later.

CPT Jerry Wood

B/6-4 Cavalry

COP Wilderness, Paktya Province

Building the U.S.-Afghan Team

In everything that you do, you will have an Afghan counterpart (if you want to be successful). Focus your first month or so on building the team. Drink the chai and eat the goat liver kabobs. This will go a long way during your deployment, especially when you are fighting side-by-side with your counterpart. Build the team first—eat "humble pie" up front if you must—and the Afghans will perform well when you need them the most. After you have built the team, assess your counterparts and tailor a "realistic" training plan for your team. The Afghanistan National Army is new, so its NCO corps does yet not have the experience to be the backbone. The officers are the backbone in their Army, so ensure that an Afghan officer is on every mission.

CPT Dan Leard

A/1-26 Infantry

COP Terezayi, Khost Province

Partnering Effectively with the ANSF

Working with ANSF is frustrating and time-consuming. You will need to earn their trust and respect. They will often attempt to make you support them logistically, largely because

CPT Jerry Wood, at Combat Operating Post Wilderness, stresses team-building initially and including one's Afghan counterpart, an Afghan officer, "on every mission."

their own logistics systems are cumbersome. Do not fall into the trap. Small assistance for critical needs that require timely response is acceptable, but know their systems inside and out, and coach them through their own requesting and resupply procedures. Always reinforce success, and never let failure become a pattern. Teaching Afghans to execute a drill or a procedure is the same as how we teach our Soldiers—muscle memory. Include them in mission pre-briefs and roll calls. Learn their names. How can they feel partnered if their name is "Hey, You"? Never publically criticize or correct; always coach in private. Do not use phrases like, "You are wrong," "That was horrible," or "You need to fix this." Instead, approach it from a coaching perspective: "I know we can do this better." "Let's do some more rehearsals on that tomorrow." Or, "How can we fix this problem?" Ask them for input and solutions. In two tours to Afghanistan—one as an infantry company commander and one as an MiTT leader—I can honestly say that the best solutions and programs I have seen were initiated by Afghan leaders telling me what we needed to do.

CPT Rebecca Doak
527th Military Police Company
FOB Gardez, Paktya Province

Working with Civilian Teammates

What I've learned from my coalition teammates is that if we get together for regular meetings to ensure that everyone has the same common operating picture and is working for the same goals, then we have a much more powerful effect on the civilian populace than if we all work on accomplishing our own missions independently.

We each bring a unique skill set to the COIN problem. The Army is very good at security, but there is more to COIN than just the security line of effort, and in many cases our civilian and coalition teammates are absolutely vital. We need the interpreters to translate for us, or else our ability to secure the populace is hamstrung. If you want to build a multimillion-dollar hospital in a village that helped you identify insurgents, the USAID agent is much better at that than any lieutenant who goes through a two-day contracting course. If you want to conduct an investigation into possible corruption at your police station, the battalion's law-enforcement professionals are perfectly suited for that task. To be successful out here, you have to value each member of the team and what they bring to the fight and then work together to achieve the same end state.

CPT Michael Carrion
C/2-2 Infantry
COP Deh Yak, Ghazni Province

Fitness and Marksmanship

Being in peak physical condition will allow you to handle a lot of the stresses that are put on you, both physically and mentally. I would argue that combat is as mentally draining as it is physically demanding. Being in great shape allows your body to handle stresses that otherwise might require behavioral health care. Marksmanship is also key. If your Soldiers are trained well in marksmanship, you will be able to take advantage of tactical situations that present themselves only a few minutes at a time. For example, when you see an enemy with a weapon, you run up the side of a hill to get a better vantage point and engage the enemy at 400 meters with a single shot to the head. Combat-stress shoots during training will pay dividends in combat.

CPT Dan Leard (left) listens to the Terezayi District sub-governor during one of their daily meetings in Khost Province. A civil-affairs team member is seated between them.

"To be successful out here," says CPT Rebecca Doak in eastern Afghanistan's Paktya Province, "you have to value each member of the team." Civilian and coalition teammates, she says, are "absolutely vital."

CPT Mark Snowbarger
C/6-4 CAV
Camp Clark, Khost Province

Fitness and Dismounted Maneuver

A high level of physical fitness—which gives you the ability to move in the mountains—is extremely important. If you don't get out of your trucks and move in the mountains, you're going to roll down the road and constantly get shot at. The Afghans like to know where you are, and huge tan vehicles really help them with this. But conducting a dismounted night movement and showing up at first light, dismounted in their village, gives you the initiative.

CPT Dana Eisenman
B/201 Brigade Support Battalion (Field Maintenance Company)
FOB Salerno, Khost and Paktya Provinces

Drivers' Training

When driving 24-ton vehicles on narrow roads across rugged terrain, good drivers' training is essential. If a virtual drivers' training suite is available, take advantage of it. My Soldiers were introduced to the MaxxPro and M-ATV in a virtual trainer long before we were able to train on actual vehicles. It allowed them to get accustomed to the cab of the vehicle and where all the controls are. More importantly, it also allowed them to understand limits of the vehicles without putting themselves or the equipment in danger. If possible, also have them drive in rugged terrain prior to deployment. M-ATVs and MaxxPros may not be readily available, but even an LMTV with shelter will help Soldiers understand what happens to a vehicle with a high center of gravity.

CPT Jason Logan
E/2-2 Infantry (Forward Support Company)
COP Andar, Ghazni Province

Making the Most of RIP/TOA

Emphasize and take full advantage of the handover with the unit you are replacing. I don't think there was any training event more important for preparing my company for our mission than the relief-in-place training we received from CPT Maxwell and his FSC for 3-187 Infantry out of Fort Campbell, Ky. I instructed my company to arrive with open minds and ears. They did, and I found that even my "crusty" NCOs with multiple deployments were able to take away valuable information that helped set us up for success. My distribution platoon benefited the most from the RIP/TOA training because they were immersed in convoy operations. The most valuable aspect of the process was learning the operation, PMCS, and troubleshooting of the new gun trucks (M-ATVs and MaxxPros), communications equipment (Harris radios) and CROWS. Even if a unit is able to get training on this equipment prior to deployment, which I highly suggest, it still will not compare with the quality of hands-on experience your Soldiers can get in their first couple of weeks on the ground by learning from their counterparts who have just done their same jobs on that equipment for the previous year.

CPT Mike Marchetti
B/2-10 Aviation
FOB Salerno, Flying in Khost, Paktya, Paktika and Ghazni Provinces

Weather, Terrain and Air-Ground Integration

Weather and terrain impact aviation operations on a daily basis. During the summer, passenger movements are restricted due to the warm weather and high elevation of LZs. Commanders would get used to moving a complete

CPT Mark Snowbarger (right) confers with his squadron commander, LTC Mark Borowski, during a patrol. CPT Snowbarger stresses the overall importance of being physically fit.

Glossary of Military Terms

ANSF = Afghan national security force
BFT = Blue Force Tracker
BN S2 = battalion intelligence
CASEVAC/MEDEVAC = casualty evacuation/air medical evacuation
CIO/G6 = Army Chief Information Officer/G6
COIN = counterinsurgency
CoIST = company intelligence-support team
COMMEX = communications exercise
COP = combat outpost
CP = command post
CPOF = Command Post of the Future
CROWS = Common Remotely Operated Weapons Station
DCGS-A = Distributed Common Ground System-Army
FOB = forward operating base
FSC = forward support company
IED = improvised explosive device
KIA = killed in action
LMTV = light medium tactical vehicle
LZ = landing zone
M-ATV = MRAP all-terrain vehicle
mIRC = Microsoft Internet Relay Chat
MiTT = military training team
MTOE = modified table of organization and equipment
PLT = platoon
PMCS = preventative maintenance checks and services
PSG = platoon sergeant
QRF = quick reaction force
RIP/TOA = relief in place/transfer of authority
SIPR = secret internet protocol router
TAC = tactical command post
TOC = tactical operations center
USAID = United States Agency for International Development

aircraft's worth of passengers in the winter and would only get half an aircraft's worth in the summer. Also, flying in the mountain passes can be a little unnerving in marginal weather. During one air assault, the most direct pass was obscured with clouds, so all aircraft had to fly the long way around, adding an extra hour per turn into the LZ. That change in timeline eventually led to the whole operation being cancelled because we couldn't get enough combat power on the ground prior to bad weather moving into the area.

Ground-force commanders and aviation commanders need to meet and understand each other to build the relationships that a fully integrated air/ground team requires. It takes days or weeks to build trust between ground units and air units, and it only takes seconds for that trust to be broken by either misidentifying targets, fratricide or landing at the wrong LZ during an assault.

CPT Joseph Mroszczyk
A/1-6 FA
FOB Salerno, with PLTs in Khost, Paktya and Ghazni Provinces

Air Assault Combat Package

After conducting our first artillery air-assault mission, I was able to stage a large portion of the equipment and supplies required for subsequent air-assault operations in my storage containers. The ability to pull a mission together with relative ease made the follow-on air-assault operation so much smoother and less cumbersome. I would definitely recommend working to build a combat package that is ready to attack a week-long mission into the middle of nowhere and that can be tailored down if parts aren't needed.

CPT Brandon Gray
B/1-168 Infantry
COP Dand Patan, Paktya Province

Communication, Personnel and Morale

As a battlespace owner, I had to own and maintain my own COP. Formal communication assets such as satellite technology, Blue Force Tracker, line of sight and cell phones will always fail when you need them to work their best. It's Murphy's Law, and no matter how many PMCSs you perform before COMMEX, something will always go wrong. It's important to have redundant means of communications so that you can effectively command and control and request resources for your unit. Informal communication between you, your subordinates and your ANSF partners is key to success. Everyone must understand the mission, commander's intent and guidance. Subordinate units will achieve success through confirmation briefs, backbriefs, rehearsals and more rehearsals.

"Personnel shortages" is the name of the game over here. You will never have enough people for your mission set. A good leader needs to be creative and understand how to "see himself" to bring the right enablers into the fight. Balancing force protection, mission, and QRF was a constant challenge, especially during the leave cycles.

Maintaining high morale and fighting complacency are difficult. Living in austere conditions for extended periods of time will wear on anyone. During the cold season, the fighting slows down, which means the excitement slows down. Even the best Soldiers begin to get comfortable in their patrolling techniques and will become irritable when they don't experience regular challenges. It is important to listen to your Soldiers; pay attention to what they have to say so that you can pick up on these sorts of things. Ensuring visits by the chaplain and doing small things such as grilling food will help morale. Enemy contact will fight complacency. Sounds peculiar, but it's true.

CPT Ben Weakley
A/3-1 Special Troops Battalion (Route Clearance)
FOB Salerno, Khost Province

Importance of the Company CP

How we chose to man our command post has been absolutely vital to our success in combat operations. Our MTOE is definitely not set up to man a 24-hour tactical CP with our

PFC Matthew Zajac, US Army, 2nd Infantry Division, Fort Carson, Colorado and his father, Mike, photographed at a Fisher House in San Antonio, Texas.

Fisher House Foundation's Hero Miles program provides military members and their loved ones free round-trip airline tickets, sending them to the bedside of their injured service member recovering at a military or VA medical center. Flights are made possible through frequent flyer mile donations by individual airline passengers.

Since its inception in 2004, the generosity of the public has allowed Hero Miles to distribute more than 25,000 airline tickets, saving our heroes and their families more than $40 million. Help reunite America's heroes with their loved ones by donating your miles today. Your contribution will make you a hero to those in need.

For more information, visit **www.fisherhouse.org** and click on *Hero Miles.*

HERO MILES

The Hero Miles program is grateful to our generous partners, including:
AirTran Airways ★ Alaska Airlines ★ American Airlines ★ Continental Airlines
Delta Air Lines ★ Frontier/Midwest Airlines ★ United Airlines ★ US Airways

Hero Miles is a program of the nonprofit Fisher House Foundation.
More information on the Foundation can be found at www.fisherhouse.org.

©2011 Fisher House Foundation / Brendan Mattingly Photography / Don Schaaf & Friends, Inc.

The most challenging leadership decision for CPT Joshua Wiles was not returning enemy mortar and rocket fire in the vicinity of a civilian population in Khost Province when "the strategic goal outweighed the immediate threat."

organic headquarters personnel. We have deliberately chosen to pull talented NCOs from the line to ensure that we have a competent battle-tracking capability. These NCOs have constantly "improved the foxhole" in our command post systems, to include maximizing our use of DCGS-A, CPOF, Centrixs and SIPR e-mail, mIRC, and Blue Force Tracker to feed relevant, actionable and timely IED-related intelligence to our patrols. In more than a dozen cases, our CP's battle NCO has pulled a flash report from an e-mail distribution list and populated the report to our patrols via BFT, resulting in an IED find at the reported location. Our robust CP has allowed us to effectively communicate in real-time with the four battalions we support, our organic battalion, and the brigade TOC. Many times, the CP's ability to receive a report and coordinate for rotary-wing assets has allowed a critical repair part to move forward in order to repair a detection or interrogation asset, allowing our patrol to complete its mission as opposed to recovering back to the FOB. Our CP coordinates with battlespace owners and the brigade aviation element to provide our patrols with QRF air-weapons teams or scout-weapons teams for additional security when our patrols experience an IED strike or troops-in-contact. Many units with similar manning issues may find it easier to keep all of their talent and manpower with their line platoons; however, in our case, making the hard decision to man our command post with some of our most talented people has paid huge dividends in IEDs found and lives saved on the battlefield.

CPT Chet Craw
B/1-6 FA
FOB Salerno, Khost Province

Training Your Company Intelligence-Support Team

Train your CoIST personnel to operate as a BN S2 shop would and be able to produce the same products and analysis. Often you will have better situational awareness than the BN S2 shop, and, if you resource your CoIST correctly and network with all the intelligence pipelines available, you can increase your ability to target without a heavy reliance on BN to push targets to you. I would also train one or two additional personnel in each platoon to be alternate CoISTers. It is very hard to replace these individuals, and in the course of a deployment you will lose one or two, creating a gap that cannot be quickly filled without extensive training.

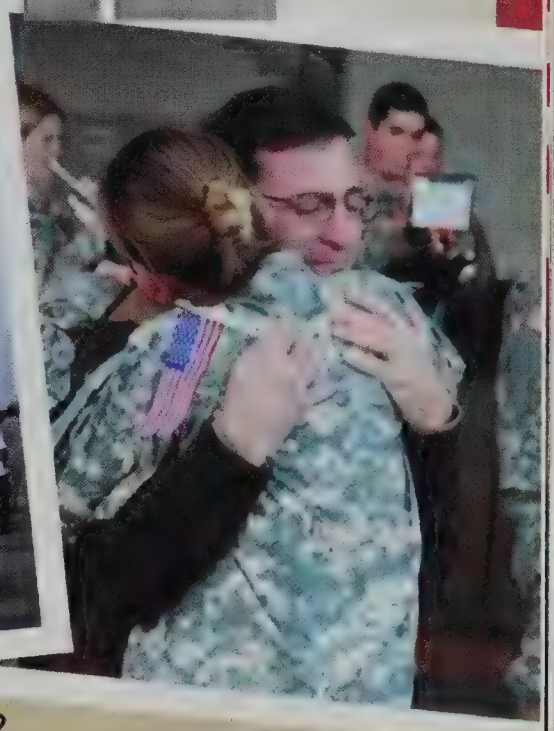
CPT Joshua Wiles
D/1-26 Infantry
COP Narizah, Khost Province

Difficult Leadership Decision

My most challenging leadership decision was not to return fire with indirect fire assets when being engaged with mortars and rockets by the enemy in the vicinity of civilian population. Insurgents were engaging our position effectively but firing from inside and around a populated area. The decision not to return fire was extremely difficult because of the psychological effect on my own Soldiers. The strategic goal outweighed the immediate threat.

The Afghan Commander AAR Book 2011 *(Task Force Duke) is available for free viewing and download in the MilSpace Library, to which all Company Command and Platoon Leader professional forum members have access. Military personnel and units are authorized to print copies of this government publication. Funding to support the development of the book was provided by an Army Study Program grant sponsored by the Army CIO/G6. If you are a currently commissioned officer who wants to engage in great conversation about growing and leading combat-ready teams—in Afghanistan or anywhere else—we invite you to log on to join your forum at http://CC.army.mil.*

WE ALL SERVE



BOB BARRETT, VICE PRESIDENT OF HAWAII BASED COASTAL WINDOWS WITH EMPLOYEE AND U.S. ARMY RESERVE SERGEANT MICHAEL ECHIVERRI.

ARMY NATIONAL GUARD ★ ARMY RESERVE ★ NAVY RESERVE ★ MARINE RESERVE
COAST GUARD RESERVE ★ AIR NATIONAL GUARD ★ AIR FORCE RESERVE

We all serve. Whether serving our communities or our country, members of the National Guard and Reserve depend on their military units, families, and employers for support. Employer Support of the Guard and Reserve is a Department of Defense agency that seeks to promote a culture in which all American employers support and value the military service of their employees by recognizing outstanding support, increasing awareness of the law and resolving conflict through mediation.

ESGR®
EMPLOYER SUPPORT OF
THE GUARD AND RESERVE

1555 WILSON BOULEVARD, STE 319, ARLINGTON, VA 22209 ★ 1-800-336-4590 ★ WWW.ESGR.MIL

Over 650 of the world's leading defense companies are members of the AUSA Sustaining Membership Program. Is yours?

The Association of the United States Army's (AUSA) Sustaining Membership Program is your vital link to Army decision-makers at the highest levels. As the Army's professional organization, AUSA has played a role in strengthening national security for over 60 years by facilitating partnerships between military decision-makers and industry leaders.

When you join AUSA's Sustaining Membership Program, your company's executives will have the opportunity to share ideas with top Army officials at AUSA events. These events are conducted and attended by high level Army decision-makers, DoD officials and industry leaders – the individuals who are setting the agenda for the Army's future!

Join us today and discover what the AUSA Sustaining Membership Program can do for your business.

AUSA Sustaining Membership Program:
Supporting the Army–Industry Partnership

Association of the United States Army
2425 Wilson Boulevard • Arlington, VA 22201 • (703) 841-4300 ext. 2665 • www.ausa.org

Soldier Armed

Nett Warrior

By Scott R. Gourley

Few Army programs are more indicative of technologies feeding an accelerating pace of Army modernization than Nett Warrior.

The system is an evolutionary outgrowth of the Army's Land Warrior program, which entered operational assessment in the summer of 2006 at what was then Fort Lewis, Wash., before initial deployment to Iraq in April 2007. The performance and early soldier feedback validated the need for a dismounted battle command system for today's warfighter with a spiral development concept directed toward evolving the lessons learned from Land Warrior into a multi-increment effort dubbed Ground Soldier System.

Multiple technology development contracts were awarded in April 2009, with the intent of moving the system through development tests and limited user tests toward a Milestone C decision in the spring of 2011.

On June 14, 2010, the Army's 235th birthday, Ground Soldier System Increment 1 was renamed Nett Warrior in honor of COL Robert B. Nett, who received the Medal of Honor as a lieutenant during World War II.

The evolution of Nett Warrior is far more than just a series of name changes, though. As exhibited at recent AUSA expositions and the semiannual Network Integration Evaluations (NIE) conducted at White Sands Missile Range, N.M., the evolution of Nett Warrior reflects the availability of immediate soldier feedback, changing requirement priorities and the emergence of new available technologies.

That evolution isn't over yet, however.

"We're chartered to provide a dismounted situational awareness and command-and-control solution down to the team-leader level," explained MAJ Greg Soule, from the office of Product Manager Ground Soldier within the Program Executive Office Soldier, "and we have been doing that up until now with Land Warrior."

Briefing the Nett Warrior program at the October 2011 Association of the U.S. Army Annual Meeting and Exposition, MAJ Soule explained, "Land Warrior is in Afghanistan right now, and it's a great capability, but it weighs 8.5 to 10 pounds, depending on the configuration. It has several different components as well as cabling and a monocle that attaches to your helmet. The monocle can get in the way, along with the size and weight issues, so we have been looking at how we can address that situation."

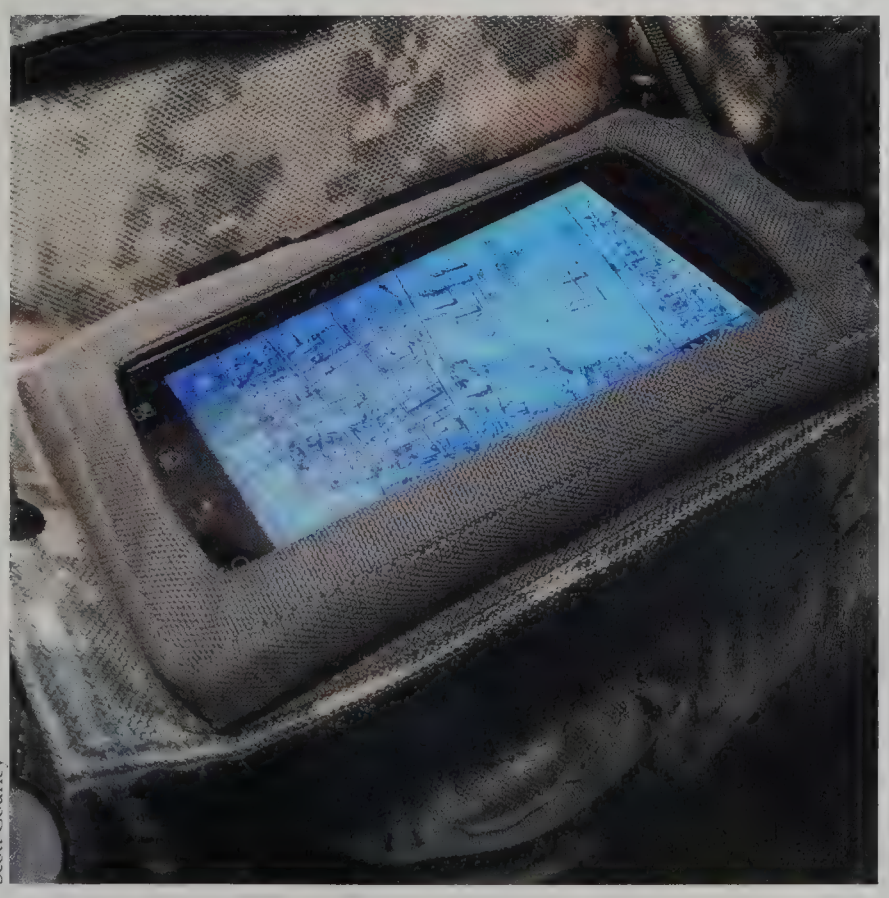
He added that the last Land Warrior-equipped unit will return from Afghanistan in the spring of 2012 with no additional deployments planned for it.

MAJ Soule acknowledged that the initial vision for Nett Warrior, as the replacement system for Land Warrior, resembled the latter's "ensemble" with an evolutionary path directed toward a future handheld solution. That path has been significantly shortened by the Army's ongoing NIE process, however.

"In NIE 11.2 back in the spring [of 2011] we had Nett Warrior Surrogate, which was basically Land Warrior with some advanced software on it," he said, noting that much of the NIE 11.2 soldier feedback was critical of the size and weight of the 10 pounds of equipment that composed the Nett Warrior Surrogate.

The post-NIE 11.2 pathway also featured some August 2011 milestone briefings before the projected Milestone C production decision.

"During our briefings with the Vice Chief of Staff and Army Acquisition Executive, Heidi Shyu, they asked us why we were still going down the route of the 10-pound monster on the back. Well, none of us really wanted to go down that route, but it was ... where the requirements said we needed to go. So we stopped, took our handheld solution to the configuration steering board, got it approved to scale down the requirements that were driving us to the bigger form factor, and then took it to NIE 12.1 [late October/early November 2011]. So there's no longer a monocle with all of the line-replaceable units and cables. It's just a handheld device tethered to some type of trans-



Scott Gourley

The screen for the wearable computer system Nett Warrior was displayed at the Association of the U.S. Army Annual Meeting and Exposition in October 2011.

Scott Gourley

Early Land Warrior training, shown here at (then) Fort Lewis, Wash., in 2006, provided enhanced capabilities at the cost of additional system cabling and line replaceable unit subsystems. Nett Warrior is an outgrowth of the Land Warrior program.

port—right now it's going to be a Rifleman Radio—and then some way to mount it.

"So NIE 12.1 was a total shift from where we have been—going from 10 pounds to less than 3 pounds—and we plug it into a Rifleman Radio as our objective transport, giving us SRW [Soldier Radio Waveform] on a JTRS [Joint Tactical Radio System] radio. We have some other transports that we are evaluating too, but this is our objective."

Examples of the other transport radios explored at the recent NIE 12.1 ranged from the DARPA (Defense Advanced Research Projects Agency) Wireless Network After Next radio to a manportable unit (currently used by special operations forces) that creates a mobile Wi-Fi network for a platoon.

MAJ Soule admitted that, because of the significant shift in configuration design, it would take a little time to solve all of the interoperability issues surrounding some of Nett Warrior's preformatted reports, like Call For Fire, Medevac and SALUTE.

"But what we do have, most importantly, is information on where I am located and where my buddies are located," he said. "We are still working through the complete functionality on all of the additional reports, but this system now takes years of Land Warrior development and all of the lessons learned there and places them on a much smaller form factor."

Along with exploring potential transport radios, the NIE participants also had different headsets and different device mounts (chest, wrist and forearm), and they were provided with capacitive (and fire-resistant) gloves to work the touch-screen displays.

Asked about earlier Land Warrior capabilities like off-axis weapons sighting for shooting around corners, MAJ Soule acknowledged, "We still have that out in theater with Land Warrior, but obviously the big thing is that it's tethered: You have a cable going from your weapon to the system. They're using it if they are in something like a static position. For example, if you're a scout on an observation post all night long, you can set up a weapon with that system and then just back off and view it in the monocle.

"Obviously we have known for a long time that this was the direction we wanted to go," he said, "but the immediate soldier feedback and ammunition out of NIE made us rapidly move to an Army Systems Acquisition Review Council and configuration steering board this spring, and here we are in the fall where we have this ready to go.

"This is purely commercial off-the-shelf right now on the hardware side," MAJ Soule continued. "On the software side we've been heading down this road for about the last year. We took JBC-P [Joint Battle Command-Platform] Beta software … and we added our reports and everything we learned from Land Warrior. We took their software and modified it, and now, every time they release a product development kit, we build it into our system to maintain that cross-functionality across the different systems."

MAJ Soule said that he expects a production decision to start fielding in fiscal year 2014 after further testing at the NIE and sound soldier feedback.

The Nett Warrior design is likely to continue to change during the next few NIEs. One possible change surfaced in the fall 2011 NIE 12.1, when GEN Peter W. Chiarelli, then-Vice Chief of Staff of the Army, was handed one of 65 prototypes for a new wireless Nett Warrior design that eliminates the remaining cable and instead relies on Bluetooth technology to link the Rifleman Radio with the screen device. ★

2012 ARMY Magazine Photo Contest

Sponsored by the Association of the U.S. Army

The Association of the U.S. Army is pleased to announce its annual ARMY Magazine photo contest. Amateur and professional photographers are invited to enter.

The winning photographs will be published in ARMY Magazine, and the photographers will be awarded cash prizes. First prize is $500; second prize is $300; third prize is $200. Those who are awarded an honorable mention will each receive $100.

Entry Rules:

1. Each photograph must have a U.S. Army-related subject and must have been taken on or after July 1, 2011.
2. Entries must not have been published elsewhere. Evidence of prior publication of any entry will disqualify it.
3. Each contestant is limited to three entries.
4. Entries may be 300 dpi digital photos, black-and-white prints or color prints. Photographs must not be tinted or altered. (Send digital photos to jwascher@ausa.org.)
5. The minimum size for prints is 5x7 inches; the maximum is 8x10 inches (no mats or frames).
6. A sheet of paper must be taped to the back of each entry with the following information: the photographer's name, address and telephone number, and caption information.
7. Entries must be mailed to: Editor in Chief, ARMY Magazine, 2425 Wilson Blvd., Arlington, VA 22201-3385, ATTN: Photo Contest.
8. Entries must be postmarked by July 31, 2012. Letters notifying the winners will be mailed in September.
9. Entries will not be returned.
10. Employees of AUSA and their family members are not eligible.
11. Prize-winning photographs may be published in ARMY Magazine and other AUSA publications three times.
12. Photographic quality and subject matter will be the primary considerations in judging.

For further information, contact Jocelyn Wascher (jwascher@ausa.org), ARMY Magazine, 2425 Wilson Blvd., Arlington, VA 22201; (703) 907-2604.

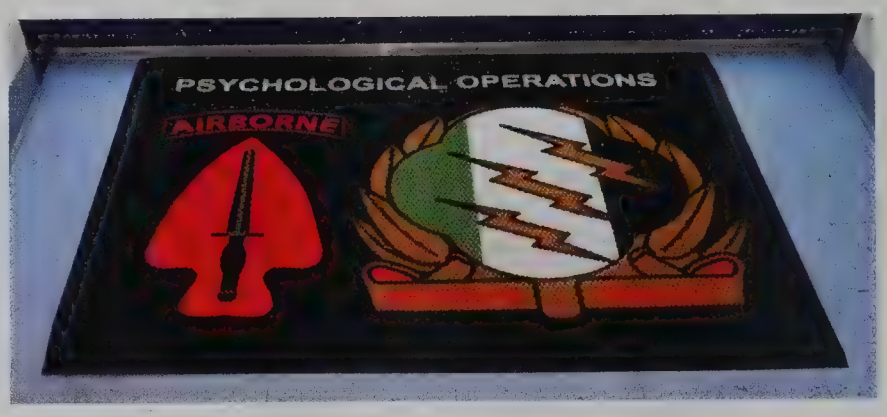
AUSA Sustaining Member Profile

Logo Mat Central

Corporate Structure—Founded: 2002. President and CEO: Michael Becker. Corporate Headquarters: 216 Little Falls Road, Units 13 & 14, Cedar Grove, N.J. 07009. Telephone: 877-237-2770. Web site: www.logomatcentral.com.

With a combined emphasis on unsurpassed customer service; an e-commerce Web site that is both user-friendly and enormously comprehensive; a product line devoted to aesthetics, safety and environmental responsibility; and a seemingly infinite selection, Logo Mat Central has carved out a successful niche in indoor and outdoor mats and rugs for governmental, commercial and industrial clients.

After noticing a lack of customer service and a limited selection at any one retail or wholesale establishment, Michael Becker founded Logo Mat Central following an earlier career in high-end fashion, an evolution he describes as "couture to carpet." The company specializes in mats and rugs that can be customized with names, sayings, graphics or logos using the most modern imaging processes, including a high-tech laser-cut process (the Chromajet process), to provide powerful visuals.



The company philosophy is based on the notion that custom logos and messaging on mats and rugs provide one of the quickest, most decisive and cost-effective ways to leave a positive first and last impression on VIPs, visitors and clients. What's more, flattering and impressive logo mats have been proven to promote morale, which has been evident at many of the bases where Logo Mat Central has delivered customized products.

Since there are few limitations to where its products can and should be used, Logo Mat Central's client base is as broad as, if not broader than, that of larger companies with multiple product lines. Logo Mat Central's client base includes military installations, property managers at industrial plants and office buildings, contractors, interior designers, event planners, hotels, resorts, casinos, spas, schools and universities, police and fire departments, sporting arenas, hospitals, supermarkets, restaurants, banks, places of worship, and more.

Logo Mat Central is exclusively an e-commerce operation, which allows Becker to devote all his time and energy to developing networks and maximizing the effectiveness of his personalized approach to customer service. Within weeks of beginning his e-commerce organization, Becker won a Government Services Administration contract, which pre-approves the company to supply products to the U.S. armed forces, government agencies on the national, state and local levels, and all public and private institutions. Since then, through diligent research and smart marketing, Logo Mat Central has become the leading supplier of custom logo mats for all branches of the military and the U.S. government. In fact, military clients attest that the laser-cut logos on mats at Army, Navy, Air Force, Marine Corps and Coast Guard installations invariably leave a strong impression.

Among the products, features and functionalities from Logo Mat Central are:

- Custom-made logo mats, such as Tough Top, Spectrum and Frontline.
- Indoor/outdoor entry mats, such as FloorGuard and OmniTrac.
- Office mats and large hall runners, such as Carpet Mat Pro and Carpet Mat Classic.
- Industrial work safety mats, such as Slip Safe and Safety Trac.
- Grease-proof kitchen drainage mats, such as Safety Chef and Triple Flex.
- Mats with Occupational Safety and Health Administration (OSHA) approved safety borders.
- Mats featuring properties for noise reduction, skid and slip resistance, welding safety, stain resistance and durability, and oil and chemical resistance.

Every Logo Mat Central item is individually screened for defects before shipment. The company offers free shipping within the continental United States, fills bulk orders and accepts corporate accounts. The company uses the largest and most experienced e-commerce subcontractor and underscores use of the safest technology and privacy protection programs to keep personal information of customers secure. Logo Mat Central uses industry-standard encryption to transmit credit card information securely—the same technology used by the majority of Fortune 500 companies and most global businesses. In addition, Logo Mat Central never discloses sales data and does not sell or rent personal information.

Today, any military, governmental, commercial, industrial or residential client needing a mat or rug for identity, safety, aesthetics or any other purpose—from foreign and domestic bases to five-star hotels—can find just what it is looking for at Logo Mat Central. A company representative will always be available to help—often Becker himself. To him, success means helping the U.S. military establish and maintain a strong identity, build morale and help maintain clean, safe facilities.

Reviews

An Anthology of the Vietnam War

In Country: Remembering the Vietnam War. *Edited by John Prados. Rowman and Littlefield. 320 pages; index; $27.95.*

By LTC Mike Burke
U.S. Army retired

Historian John Prados, director of the Vietnam Documentation Project at the National Security Archive, tells the story of the Vietnam War by combining narratives of personal experience embedded in a matrix of a solid survey of the war's history. He begins with an introduction that provides a brief historical background to the war—from Vietnam's first colonization by the French to its complex independence, then through the American involvement to the last helicopter leaving the roof of the American Embassy.

Prados draws on a variety of sources—personal narratives, works of art, historical accounts and several award citations—contextualizing them by deft histories of the several phases of the war—advisors, major unit engagements, the Tet Offensive, the Khe Sanh campaign, "Vietnamization," the air and sea wars, and the final North Vietnamese offensive that ended the war and unified the country. Familiar names appear—GEN H. Norman Schwarzkopf Jr., GEN Colin L. Powell, COL David H. Hackworth and GEN Harold G. (Hal) Moore—but they are outweighed by the numerous accounts of lieutenants, sergeants and privates who bring their own experiences to life in affecting ways.

Many of the stories come from helicopter crews, evidence of the heavy American reliance on air mobility as well as the singular nature of their experiences—defying gravity, the dissociative nature of going in and out of combat so quickly. Some of these stories are well-known, such as the role of CW Hugh Thompson Jr., who helped break the My Lai massacre story. We hear of his anger and pain anew as if for the first time. Other stories are not so well-known, such as that of Marine LCpl Ronald D. Winter, whose 1968 A Shau Valley recollections include his three ways to cope: "fly forever … make music a part of your life … or turn into a booze scrounger, trying to drink yourself into oblivion each night and spending half the next day recovering before starting all over again. In reality, many of the Marines in HMM-161 [Marine Medium Helicopter squadron 161] took on portions of all three of those choices."

The range of stories includes those of a few prisoners of war, which mostly focus on their capture, not their captivity. Other stories include what it was like to undergo an Arc Light strike—the incredible damage caused by B-52 bombing. Even a CIA agent makes an appearance. Prados also includes some works by poets Yusef Komunyakaa and W.D. Ehrhart.

Most of this book is about suffering—the soldiers, the nurses, the special services women, the sailors, the airmen, of course—but also that of the Vietnamese themselves. Prados includes memoirs of both North Vietnamese and South Vietnamese officers and soldiers, as well as stories of civilians and their own families. Of profound and immediate effect are stories of military families found all over the battlefield—the Montagnards' wives and children in the Special Forces camps, the South Vietnamese officers' families in cities like Hue and Saigon, and the North Vietnamese families undergoing the heavy air bombardment of the north.

Officers and troops in the south were torn constantly between their desire to protect their own families and their duty to their units. A few of the South Vietnamese officers' stories suggest their units were more effective than perhaps popular imagination envisioned—a useful corrective. These Vietnamese experienced an entirely different war from that of the Americans, something several of the soldiers point out. SPC Al Sever, a helicopter crewman who served multiple tours, argues that restricting Americans to their bases for much of the war made them regard all Vietnamese as the enemy. "Granted," he says, "we Americans were, on the whole, barbarians. But maybe they could have civilized us a little."

Prados uses an odd selection process for his sources: He informs the reader that he picked those that could be found still in print or in a library so that readers could continue to explore the fuller versions of the hundreds of stories. This raises the issue of audience—who is this book for, exactly? If meant as a supplemental text for an undergraduate course, perhaps the fragmentary nature of each narrative and the (fairly) readily available full-length texts it represents would work. If meant as an introduction into the world of Vietnam War narrative, however, the brevity of each memoir works against it. Each leaves us wanting

National Archives

PFC David Sletten, a medic with Company B, 1st Battalion, 27th Infantry, 25th Infantry Division, paddles an assault boat down a canal during Operation Tong Thang I.

more. If it is intended as a kind of stand-alone text, its utility would be greatly enhanced with recollections of the stories we do not already know.

The real labor here is in Prados' notes, introduction and overview, which succinctly present the various phases of the war and establish a useful context for the stories. It is too bad that the word "editor" has such limited connotations; Prados' own writing deserves more credit.

As it is, two images became stuck in my head as I read this: *TIME* magazine covers from the war years (which featured many images of those who led and fought the war) and the card file from Denis Johnson's 2007 Vietnam novel *Tree of Smoke*. Both of these present fragmentary views of the war, and both try to arrange those fragments into something sensible. In contrast, Prados' great gift is his solid structure and commentary that add a context that might—just might—lead to understanding.

***LTC Mike Burke**, USA Ret., taught English at the U.S. Military Academy for eight years. He served with the 1st Armored Division during the Persian Gulf War.*

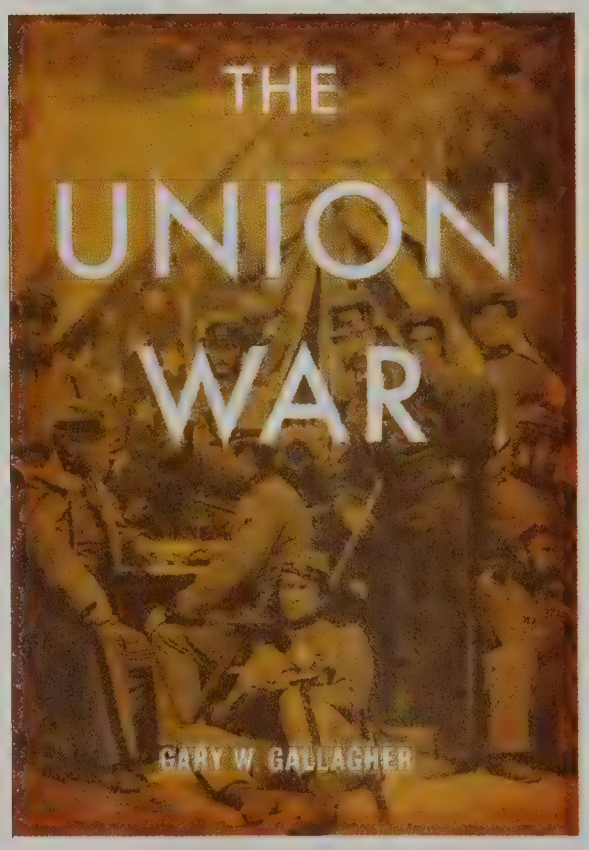
Fighting for 'Oneness'

The Union War. *Gary W. Gallagher. Harvard University Press. 256 pages; photographs; notes; index; $27.95.*

By COL Cole C. Kingseed
U.S. Army retired

With the advent of the sesquicentennial of the Civil War, numerous historians have addressed the causes of this nation's bloodiest conflict and the motivation that compelled millions of citizen-soldiers to take up arms to fight for cause and comrades. In *The Union War*, noted military historian Gary Gallagher emphatically states that the "loyal American citizenry fought a war for Union that also killed slavery." Currently the John L. Nau III Professor of History at the University of Virginia, Gallagher offers *The Union War* as a companion piece to his previously published book, *The Confederate War*.

In his current work, Gallagher seeks to recover what "Union" meant to the generation that fought the war. To address this issue, Gallagher examines three fundamental questions: What did the war for Union mean in mid-19th-century America? How and why did emancipation come to be part of the war for Union? And how did armies of citizen-soldiers figure in conceptions of the war, the process of emancipation and the shaping of national sentiment? Gallagher's focus lies on one part of the population in the United States—citizens in the free states and four loyal slaveholding states who opposed secession and supported a war to restore the Union.



Complicating the problem is Gallagher's belief that the meaning of *Union* in current society has been almost completely effaced from popular understanding of the conflict since *Union*, as defined in a political sense of 19th-century America, has disappeared from our lexicon. Not surprisingly, much Civil War scholarship since the centennial commemoration of the Civil War has diminished the centrality of Union and replaced it with an emphasis on slavery and emancipation. In *The Union War*, Gallagher moves to correct this imbalance.

Gallagher begins his narrative with the Grand Review of U.S. forces in Washington, D.C., May 23–24, 1865. All the soldiers from the three armies who marched in the review were white Americans, the U.S. Colored Troops (USCT) in the Department of Virginia and North Carolina having been consolidated in a separate army corps and

reassigned to the Rio Grande where thousands of French regulars in Mexico posed a potential threat.

So what role did emancipation play in the average soldier's motivation to wage total war? Gallagher notes that the majority of loyal citizen-soldiers were largely indifferent toward enslaved black people, but they embraced emancipation "as a tool to punish slaveholders, weaken the Confederacy, and protect the Union from future internal strife." As late as August 1864, Lincoln responded to critics who accused him of carrying on this war for the sole purpose of abolition by stating that the war "is and will be carried on so long as I am President for the sole purpose of restoring the Union. But no human power can subdue this rebellion without using the Emancipation lever as I have done."

A year later, Lincoln included a phrase in his second inaugural address stating, "The progress of our arms, upon which all else chiefly depends, is as well known to the public as to myself." The "all else" included emancipation. The public reaction to the Grand Review confirmed the belief that the soldiers embodied what was best about the American republic. The combatants from the free states had saved the Union and ensured its future solvency by destroying slavery. According to Gallagher, the army stood "as a powerful national symbol and the largest and most important unifying institution."

Library of Congress

In light of a proclamation made by Union GEN Benjamin F. Butler in 1861, African Americans who reached military lines—like the 23 refugees photographed above—were treated as contraband of war and not returned to Confederate control.

One of the more intriguing aspects of *The Union War* lies in Gallagher's assertion that the 25th anniversary of the Battle of Gettysburg provided the splendid opportunity for the wartime generation to revisit the war's purposes and outcomes. Numerous states placed regimental monuments on the war's bloodiest battlefield, and many speakers celebrated the Union and its citizen-soldiers. Likewise, the vast majority of

ARCIC/AUSA
WRITING CONTEST

The Army Capabilities Integration Center (ARCIC) is seeking to identify, discuss and influence the outcome of significant defense issues that affect the U.S. Army. To allow for more direct participation in the public debate of defense-related issues, ARCIC and AUSA are once again co-sponsoring a writing contest. The submission of quality manuscripts is encouraged.

Contest participants may choose from three themes:

- The Network as a Weapon and Mission Command;
- Asia-Pacific and the Middle East; and
- Special Operations Forces and General Purpose Forces Integration.

Papers must be original, unpublished and between 5,000 and 10,000 words, with a one-page synopsis and a brief biography of the author. The deadline for submission is 31 May 2012. A cash prize* of $1,000 will be paid to the winner, and all papers will be submitted to AUSA's Institute of Land Warfare for possible publication.

* *Essays submitted by individuals employed by/assigned to ARCIC and by individuals employed by AUSA national headquarters may be considered for publication by AUSA, but those individuals will not be eligible to receive the cash prize.*

The United States Army neither states nor implies any endorsement of AUSA, the Institute of Land Warfare or any other nonfederal entity participating in this event.

Paper Submissions

on disk only to:
ARCIC Initiatives Group
ATTN: D. Shunk
Room 4105B, Building 950
950 Jefferson Ave
Fort Eustis, VA 23604

or e-mailed to:
david.shunk@us.army.mil

For more information, visit www.arcic.army.mil

orators deprecated the Confederacy and its oligarchic slaveholders.

Speaking at the dedication of the 20th Maine Infantry's marker on the spur off Little Round Top on October 3, 1889, Joshua Lawrence Chamberlain recalled the powerful nationalizing force of the armies. "The organization of the army of the Union was a counterpart of that of the Union itself," he told the crowd. "Our thoughts were not then of States as States, but of the States united—of that union and oneness in which the People of the United States lived and moved and had their being." Lincoln could not have said it better.

What are we to make of this? Gallagher remains convinced that the public followed the armies' victories and defeats because the armies represented their own support of the Union's fundamental principles built on the democratic experiment. The army emerged from the war as "an expression of a free society's reliance on citizen-soldiers, and the principal instrument wielded to salvage and safeguard the Founders' constitutional handiwork." Thus the wartime generation never forgot that, as Lincoln stated in his second inaugural, all else indeed had depended on the progress of Union arms.

At war's end, Secretary of State William Steward proclaimed, "Their great work is the preservation of the Union and in that, the saving of popular government for the world." Lincoln eloquently articulated in his Gettysburg Address his fervent hope that this nation "of the people, by the people, for the people shall not perish from the earth." It was this belief, posits Gallagher, that led the Union soldier into battle and ultimately to victory over the Confederacy. □

***COL Cole C. Kingseed**, USA Ret., Ph.D., a former professor of history at the U.S. Military Academy, is a writer and consultant.*

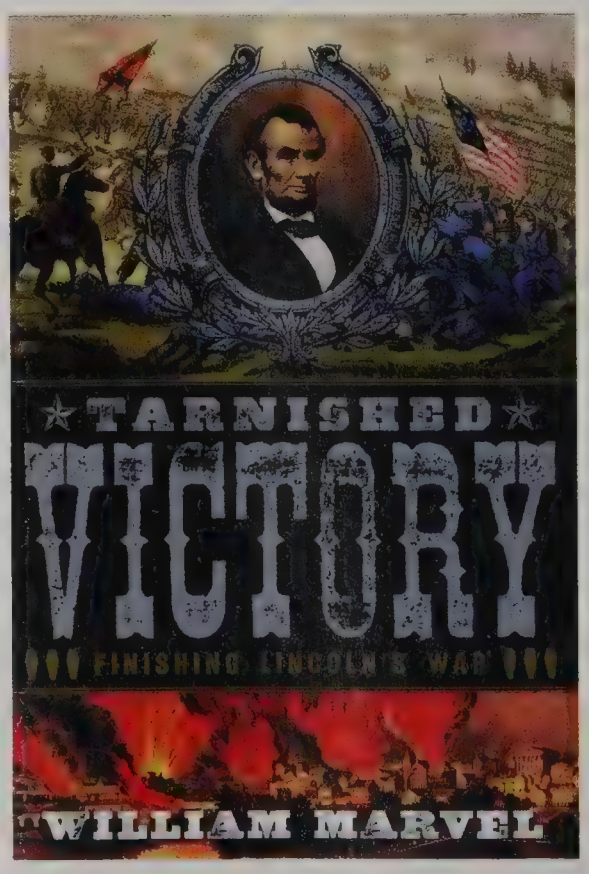
The Final Year

Tarnished Victory: Finishing Lincoln's War. *William Marvel. Houghton Mifflin Harcourt. 473 pages; index; black-and-white photographs; maps; $35.*

By COL Gregory Fontenot
U.S. Army retired

William Marvel's *Tarnished Victory: Finishing Lincoln's War* chronicles the last and, in some ways, the most terrible year of the Civil War. This is the fourth and final volume Marvel has written to account for each year of the epic struggle between North and South. Marvel's commitment to the war runs deep. In addition to these four books, he has written several others and edited a book containing the letters of a sailor who served on the USS *Monitor*. He is not the least romantic about the war, soldiers, generals or the political leaders on either side. Marvel's account is not so much a military history as it is a history of a year of the long war that, from his perspective, ended in a tarnished victory.

The book reflects Marvel's well-supported conviction that by 1864, despite the Battles of Vicksburg and Gettysburg, the North had tired of attempting to force the South back into the Union. Marvel also believes that the mythology of the war fails to account for, as he puts it, "the intensity of the exhilaration, dejection, and uncertainty felt by those who witnessed the worst of all American conflicts." He drives this point home by reviewing the depth of despair felt in the North as late as the summer of 1864. He makes evident the increasing level of suffering Union soldiers endured, which stemmed from often miserable leadership in the field and from bitter



fighting as GEN Ulysses S. Grant slowly saw the realization of his operational vision of strangling the South.

While the Union troops suffered, however, so did the southern soldiers and civilians. As GEN Philip H. Sheridan laid waste to the Shenandoah and GEN William T. Sherman cut his swath to the sea, federal troops were no longer restrained by their leadership. This resulted in some of them taking their frustration and misery out on the rebel civilians they encountered. To add to southern suffering, Rear Adm. David G. Farragut seized Mobile, Ala., and joint forces on the East Coast closed the last of the Atlantic ports with the result that the South could no longer smuggle supplies in from Europe.

Progress that year came slowly enough that both sides remained convinced, until nearly the end, that the southern soldiers could best the Union armies. They continued to do so, albeit with less and less frequency as 1864 wore on. Lunges by GEN Jubal A. Early in the Shenandoah Valley, one of which reached Washington; desperate defensive fights by the Army of Northern Virginia; MG Sterling Price's raid; and even the hapless GEN John B. Hood periodically tested the Union army and, more importantly, the patience of the Union's civil population.

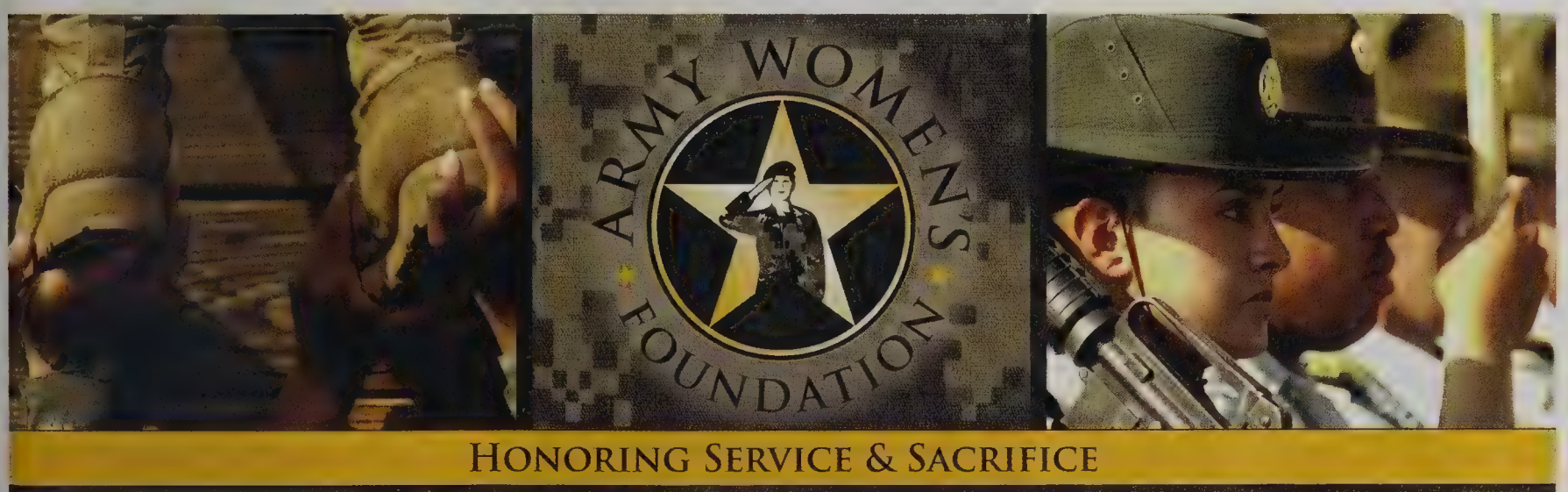
According to Marvel, the defeatism in the spring of 1864 persisted throughout the summer. While the Union enjoyed success at Mobile, Grant fought bloody battles in Virginia, the Wilderness Campaign and at Spotsylvania Courthouse and in Petersburg.

That spring and summer, both sides were in some ways reaching the end of their tether, physically in the case of the South and at least spiritually in that of the North. Three years of tactical mismanagement, disease and accident wasted the armies fighting in the East. Soldiering anywhere that year had its problems, but soldiers in the Army of the Potomac and the Army of Northern Virginia, in particular, faced long odds for survival.

As Marvel shows, in practical terms all of this meant disaffection with the fighting even among those who staunchly supported the war. Many of the war's loudest supporters had no interest in personally investing their time in it. Marvel illuminates the deeds of such people including George Templeton Strong, a New York City lawyer. According to Marvel, Strong was redoubtable in his support for the war and proved equally ardent in avoiding service. Marvel reports that Strong had "periodically berated President Lincoln for hesitating to draft enough men." When finally drafted, however, he "bought" a substitute for the handsome sum of $1,100. Beyond exposing patriots of Strong's ilk, Marvel lays

Library of Congress

Flag-raising ceremony inside Fort Sumter, Charleston, S.C., April 14, 1865.



HONORING SERVICE & SACRIFICE

THE ARMY WOMEN'S FOUNDATION IS A MAJOR PROPONENT OF EDUCATIONAL EXCELLENCE, THE NATIONAL NETWORK FOR TODAY'S ARMY WOMEN AND A DYNAMIC ADVOCATE FOR TELLING THE STORY OF ARMY WOMEN, PAST AND PRESENT.

THE ARMY WOMEN'S FOUNDATION IS A PRIVATE, NON-PROFIT 501(C)(3) ORGANIZATION ORIGINALLY ESTABLISHED IN 1969.

WWW.AWFDN.ORG ★ INFO@AWFDN.ORG ★ (804) 734-3078

bare the ugly body of history associated with the draft and the whole corrupt, inefficient and unfair process of manning the Union forces.

Tarnished Victory is laced with personal contemporary accounts of what it was like to live through that final year of the war and—using diaries and letters—what it was like to die in that final year. The political shenanigans, hubris, ambition and determination—indeed all the emotions and actions one might expect of imperfect beings under great stress—are revealed in the pages of this outstanding narrative.

Tarnished Victory will not satisfy the reader who wants red and blue arrows illustrating the horrific fighting that occurred; this can be found elsewhere. Instead, Marvel captures the intense experience of participating in this long and increasingly bitter war, which finally sputtered out over several weeks after GEN Robert E. Lee surrendered the Army of Northern Virginia.

So what tarnished the Union victory? Marvel does not spell out his conclusion, but he leaves no doubt that waste, corruption, ineptitude, abuse of the Constitution and, most of all, failure to free all of the slaves for good tarnished the end of Lincoln's War.

***COL Gregory Fontenot**, USA Ret., commanded a tank battalion in Operation Desert Storm and an armor brigade in Bosnia. A former director of the School of Advanced Military Studies, he is coauthor of* On Point: The U.S. Army in Operation Iraqi Freedom *and is director of the University of Foreign Military and Cultural Studies.*

Varied Fare

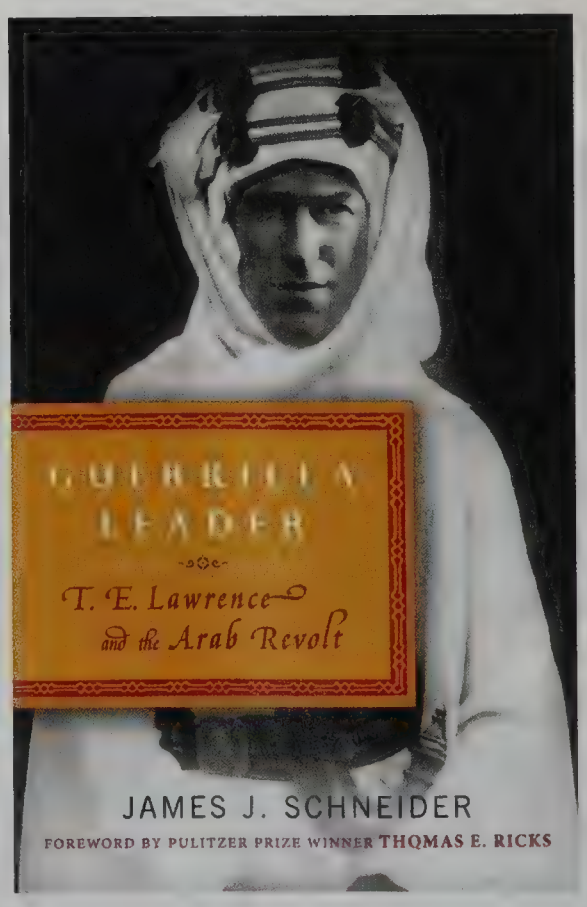
Guerrilla Leader: T.E. Lawrence and the Arab Revolt. *James J. Schneider. Random House. 368 pages; $28.00.*

The great Prussian soldier and military theorist Carl von Clausewitz could have had Thomas Edward Lawrence in mind when he wrote: "If the mind is to emerge unscathed from this relentless struggle [in battle] with the unforeseen, two qualities are indispensable: first, an intellect that, even in the darkest hour, retains some glimmering of inner light which leads to truth; and second, the courage to follow this faint light wherever it may lead."

T.E. Lawrence possessed the inner light that Clausewitz so eloquently described almost a century earlier. According to James J. Schneider's excellent new book, *Guerrilla Leader: T.E. Lawrence and the Arab Revolt*, this inner light survived—in some cases narrowly—every effort to extinguish it.

Most Americans of my generation know him as "Lawrence of Arabia" from the memorable movie of the same name, but behind the legend and myth is a very real person who suffered, endured and succeeded against all odds and who deserves the fame and celebrity attributed to him during his lifetime and the respect of current and future generations. He was an agent of change, a leader of men, a builder of nations and a true hero.

Lawrence was a gifted scholar and writer, a talented mapmaker who became a British intelligence officer at the outset of World War I. Unschooled in the art of war, he nevertheless led and inspired a loosely affiliated cluster of desert tribes to band together in an insurgency against their Turkish overlords. He earned his place in history as a great guerrilla leader the old-fashioned way. He learned the language and culture and shared the harsh living conditions of the Arabs without complaint, earning him their respect and acceptance into their lives.



Schneider does an excellent job of outlining the strategy used by Lawrence against the Ottoman Empire, the same strategy used by U.S. Special Forces today in the struggles in Iraq and Afghanistan. There are ample lessons to be learned by the leaders of today from this unconventional soldier. In today's parlance, one would say that he won the hearts and minds of the Arab people. Schneider also offers insights into the psychological effects of persistent conflict on Lawrence and how it affected his leadership, and it is clear that he exhibited signs of post-traumatic stress disorder.

Guerrilla Leader is a compelling narrative of the Arab revolt with a thorough and authoritative analysis of T.E. Lawrence—the man behind the legend. My only complaint is that the book has but one map and no photos inside. Maps would be helpful for keeping track of Lawrence's movements, which sometimes sounded more like ships moving over a limitless ocean than an army on camelback moving about a vast, featureless desert. Photos of the main characters would have been helpful in imagining the varied and complicated relationships.

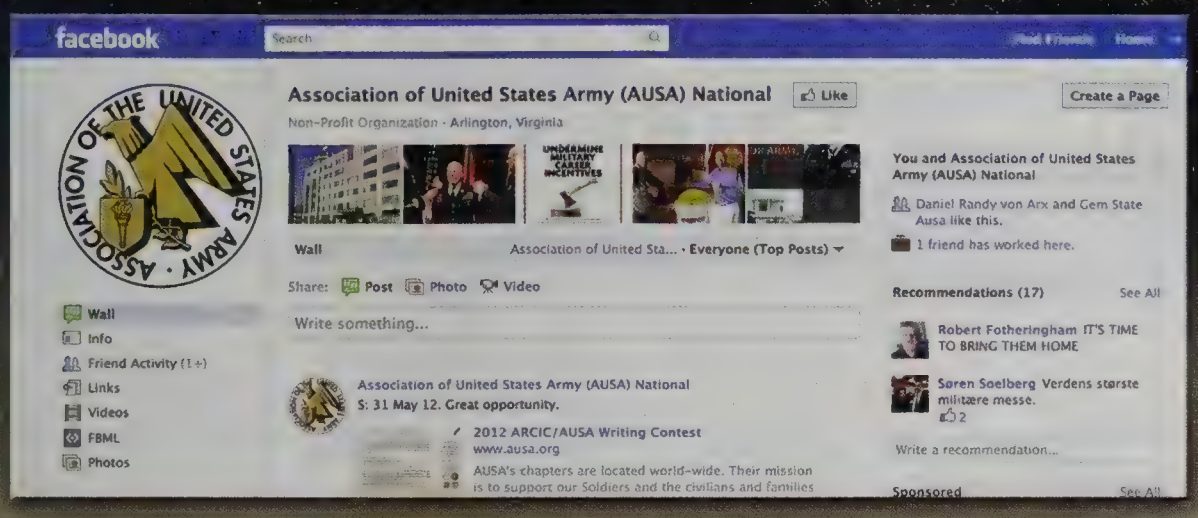
Guerrilla Leader reintroduces an authentic guerrilla-warfare genius to a new generation, a generation badly in need of heroes. I highly recommend this book.

—CSM Jimmie W. Spencer, USA Ret.

Correction

The GEN Smith mentioned in last month's review of *Marshall and His Generals* was Army GEN Walter Bedell Smith, not Gen. Holland M. Smith.

AUSA is on Facebook



Association of the United States Army (AUSA) National

Go to the AUSA website: www.ausa.org

Click on Find us on Facebook ***at the bottom of the page.***

If you have a Facebook page, become an AUSA "friend."

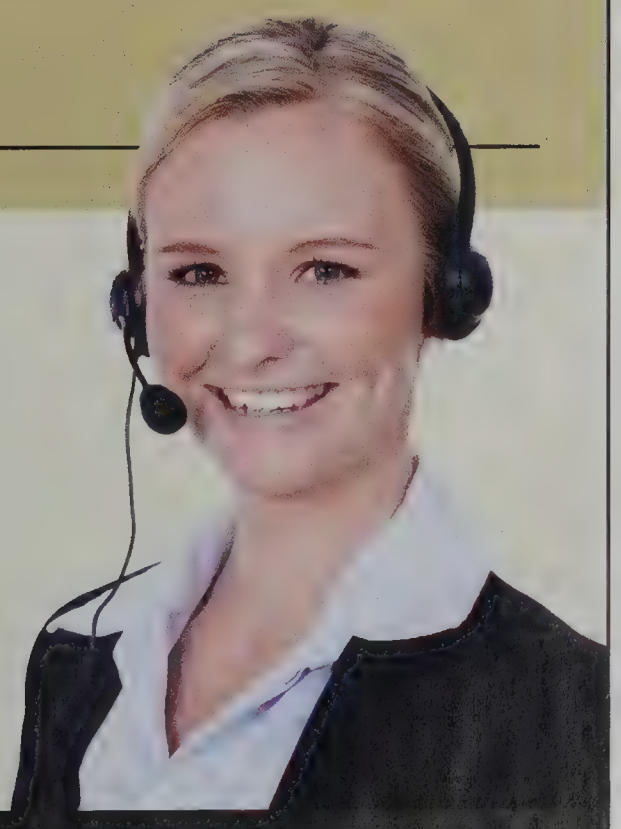
To become a friend, you must have a Facebook account.

ANNOUNCING

AUSA's Member Support Call Center

Our new call center is up and running.

The call center will answer AUSA membership related questions and concerns.



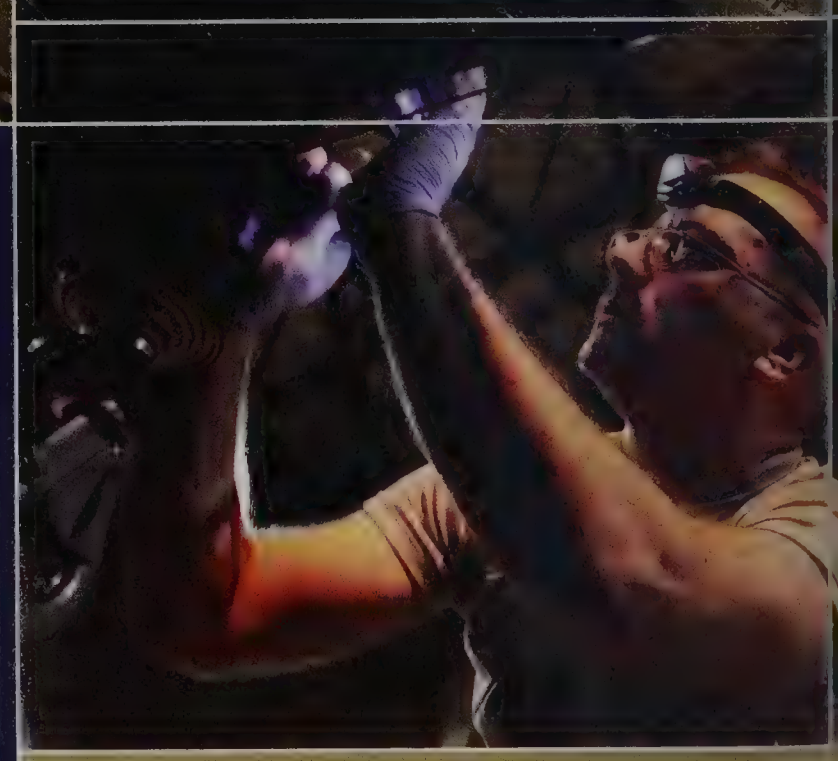
855-246-6269 **DIRECT DIAL**

ASSOCIATION OF THE US ARMY | 2425 Wilson Blvd. | Arlington, VA 22201

The Association of the United States Army's Institute of Land Warfare

ARMY SUSTAINMENT SYMPOSIUM AND EXPOSITION

A Professional Development Forum



8–10 MAY 2012

The Greater Richmond Convention Center
Richmond, VA

Register online at www.ausa.org

FOR MORE INFORMATION CONTACT

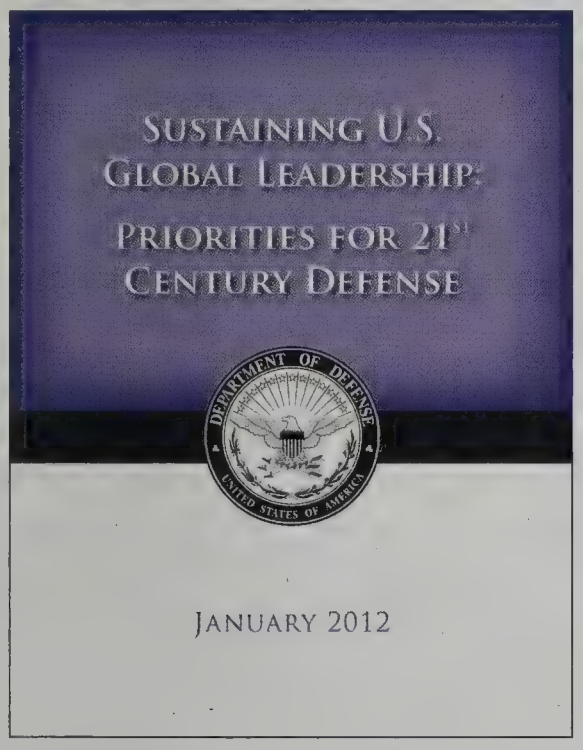
AUSA, Industry Affairs: 800-336-4570, ext. 2416

Historically Speaking

Naval Supremacy: How Much Is Enough?

By BG John S. Brown
U.S. Army retired

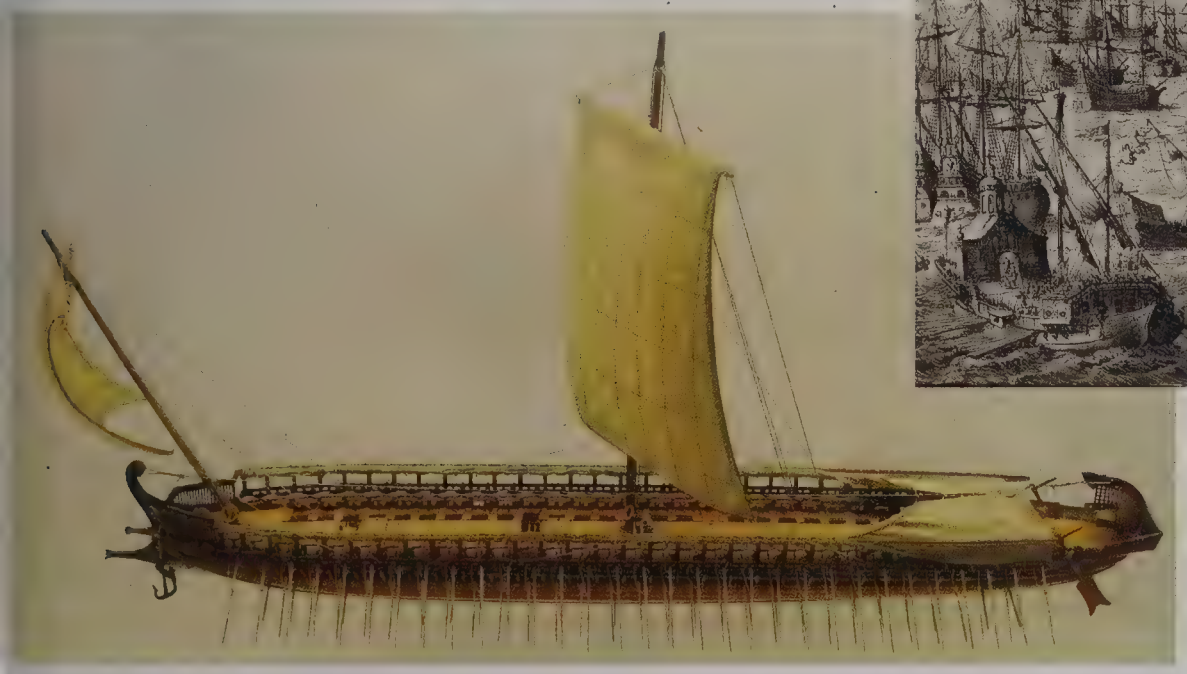
Many of us have read with great interest the newly promulgated *Sustaining U.S. Global Leadership: Priorities for 21st Century Defense*, signed by our President. As written, the document is thoughtful, forward-looking, and a worthy pediment upon which to construct further defense planning. This does not, unfortunately, mean that interpretations by pundits have been uniformly thoughtful, forward-looking or worthy. Too many tell us that we now are committed to wildly slashing ground forces in favor of refurbishing air and naval supremacy. Ground force structure will undoubtedly come down, but *Sustaining U.S. Global Leadership*'s anticipated pace, envisioned floor and stated objective of "reversibility" offer important caveats to pell-mell dismantlement. We addressed air enthusiasm in the January issue of ARMY. With respect to achieving naval supremacy, how much is enough?



Historically, a number of thalassocracies were so dominant as to have been considered sovereign on the seas. These included Athens in the fifth century B.C., Rome from the end of the First Punic War well into the third century A.D., Spain in the middle of the 16th century, Britain in the 19th century, and the United States from the end of World War II until the global war on terrorism. At the height of its powers, Athens had perhaps 200 triremes. Sparta and its allies had a little more than 100. By the Punic Wars the capital ship was the quinquireme, and Rome cemented its victory in the First Punic War by deploying 220 ships. The Spanish, for a period, were thought supreme at sea because they had twice as many galleons as any potential adversary. In 1803, during the Napoleonic Wars, the British had about 120 ships of the line as compared to about 40 for France, 30 for Spain and 20 for Holland. Thus the British tripled any single potential adversary and doubled likely combinations. These odds got even better for them when they captured or sank a score of French and Spanish ships off Cape Trafalgar in 1805. Through the ages of oar and sail, a 2-to-1 advantage in capital ships seems to have been equivalent to naval supremacy.

With the Industrial Revolution, sustaining naval supremacy became more taxing. Technological advances brought on obsolescence much more rapidly. Ships and weapons had to be refurbished far more frequently. During the mid-19th century, steamships (screw) and sailing ships each had advantages and disadvantages. In 1859 the British and French ran neck-and-neck with respect to screw, but the British had more than a 2-to-1 lead with respect to sail. The British were still considered supreme at sea, in part because seamanships allowed them

Amsterdam Museum



Above, the ships of the Spanish Armada stretched to the horizon in 1588 as depicted by 17th-century Dutch engraver Jan Luyken. Left, a model of a Greek trireme reconstructs the three rows of oars that propelled it.

U.S. Navy/MC 2nd Class Kevin B. Gray

The aircraft carrier USS Ronald Reagan *sails toward Hong Kong for a port visit last August.*

to use their overwhelming overmatch with respect to sail to best advantage. Germans, Japanese and Americans entered the lists in the late 19th century, and a race to construct modern battleships and cruisers ensued. Britain resolved to deploy at least as many battleships and cruisers as the next two powers combined. It helped Britain that the second greatest naval power continued to be France, and France switched from rival to ally in the face of a rising threat from Germany. Throughout the 19th century, a 2-to-1 advantage in capital ships remained an indicator of naval supremacy.

World War I and World War II respectively introduced and reinforced radically altered paradigms for assessing naval supremacy. Technology and specialization added the aircraft carrier (and aircraft), the submarine and the destroyer escort to the force mix. Battleships and cruisers were not particularly relevant to securing merchant shipping from submarines. Destroyer escorts were relevant but were hopelessly overmatched if caught proximate to enemy battleships and cruisers. Aircraft carriers were lethal at long ranges but relatively few in number and helpless in a direct-fire exchange. Rather than merely counting up capital ships, force planners had to overmatch in multiple venues in a "rock-paper-scissors" sort of way. (As German U-boats nearly proved, a naval power has to achieve overmatch in only one of multiple venues to deny an opponent reliable use of the sea.) At the height of the Cold War, the United States and its principal allies outnumbered the Soviets approximately 20-to-1 in aircraft carriers, 3-to-1 in frigates and destroyers, 3-to-1 in amphibious craft and 2-to-1 in cruisers.

With respect to nuclear submarines, however, the odds were even. Naval supremacy did not accrue from numbers of ships alone; it accrued from a confidence that a combination of air, surface and sub-surface attacks—informed by near-perfect intelligence—could destroy the Soviet submarine fleet before it could inflict unacceptable damage. To control the sea, one had to overmatch in each of the venues wherein that control might be contested.

Happily, the Soviets have disappeared as a principal threat driving force design. The Russians do have a submarine fleet, but it is radically reduced in size and even more radically reduced in capability from Soviet precedents. The new justification for naval upgrades seems to be China. It is hoped that we are not standing China up as a boogeyman to scare us into undue expense. China is profiting immensely from the international order as it now exists, secure in its borders, aging and historically risk-averse. It has little to gain and much to lose from conflict with the United States. Despite recent improvements, China's capability to operate at sea beyond the range of land-based aircraft remains negligible. They have one aircraft carrier and no cruisers. The United States and its allies outnumber them about 5-to-1 in destroyers and frigates, and perhaps 10-to-1 in nuclear submarines. China has enough coastal warfare vessels and conventional submarines to make a landing on its coasts risky, but this would be a very bad idea anyway. China does have a robust inventory of amphibious warfare vessels. This makes a sudden descent on Taiwan or the Paracel or Spratly Islands feasible militarily, if unlikely diplomatically. All factors considered, China's maritime options are limited, predictable and containable.

As *Sustaining U.S. Global Leadership* plays out, there will undoubtedly be analytic exercises wherein multiple scenarios are dissected for insights relevant to future force structure. We have done this before. We owe it to our soldiers, sailors, airmen and marines to ensure that the dominant scenarios are realistic and likely. Naval supremacy is vital to our global standing. Determining what it takes to achieve naval supremacy will profit from rigorous analysis and an appreciation of historical precedent. Adversaries tend to strike at weakness rather than strength. Where will we be weak in 2020? ★

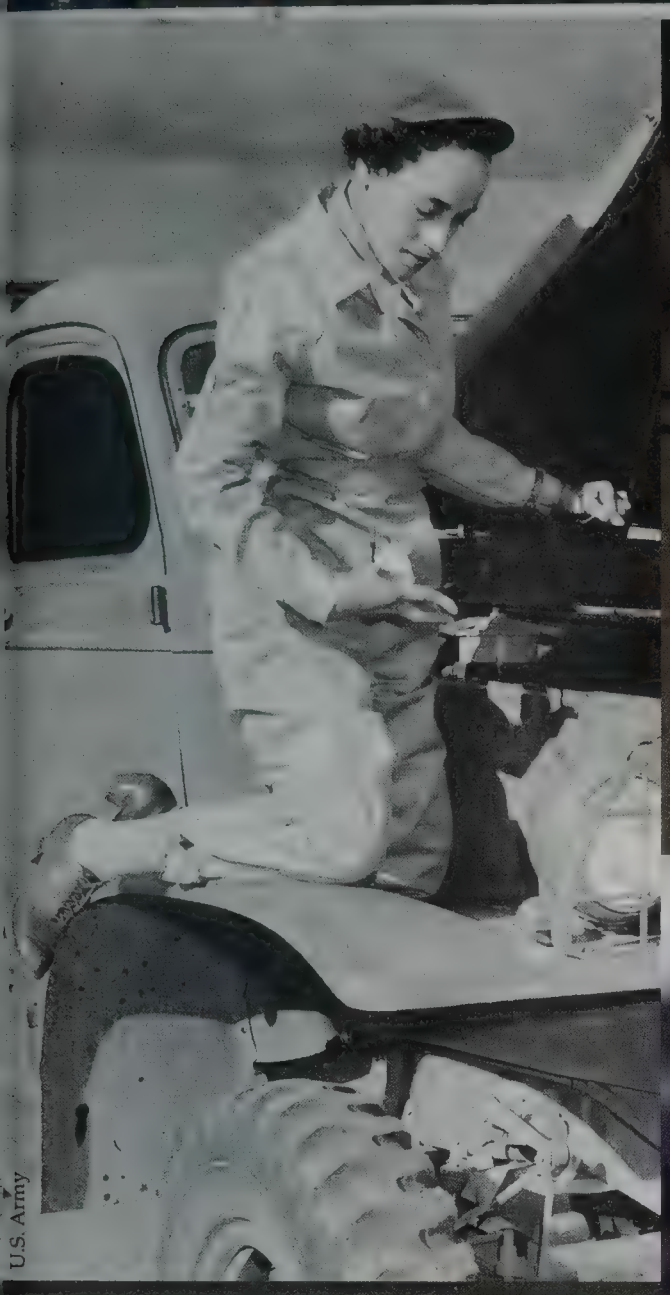
***BG John S. Brown**, USA Ret., was chief of military history at the U.S. Army Center of Military History from December 1998 to October 2005. He commanded the 2nd Battalion, 66th Armor, in Iraq and Kuwait during the Gulf War and returned to Kuwait as commander of the 2nd Brigade, 1st Cavalry Division, in 1995. He has a doctorate in history from Indiana University. His book,* Kevlar Legions: A History of Army Transformation 1989–2005, *was recently published.*

Recommended Reading:

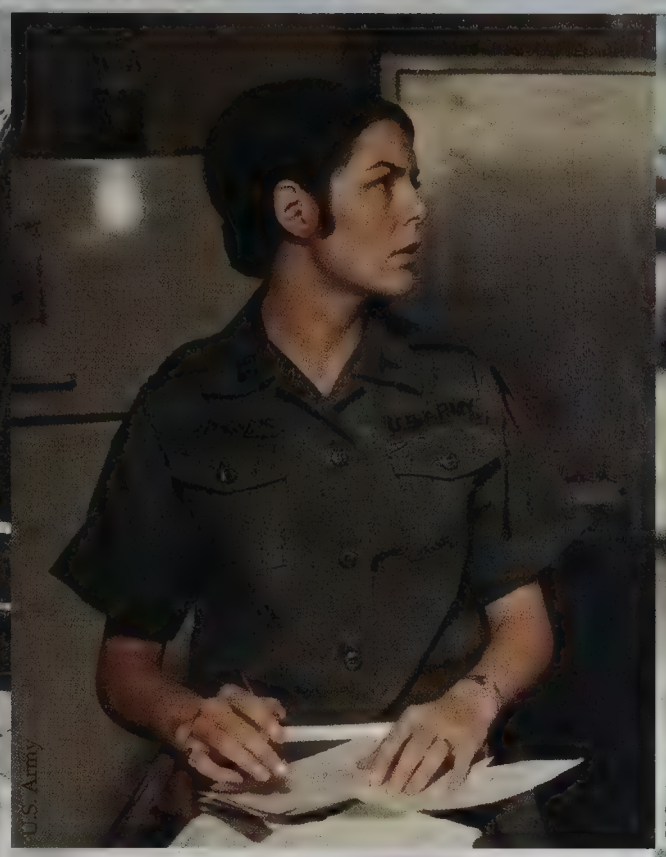
Grant, R.G., *Battle at Sea: 3,000 Years of Naval Warfare* (London, England: Dorling Kindersley Limited, 2008)

Hughes, Captain Wayne P. Jr., *Fleet Tactics: Theory and Practice* (Annapolis, Md.: Naval Institute Press, 1986)

Sustaining U.S. Global Leadership: Priorities for 21st Century Defense (Washington, D.C.: Department of Defense, 2012)



U.S. Army



U.S. Army

U.S. Army

U.S. Air Force/Tech. Sgt. Lopez

U.S. Navy/PH2 Kenneth J. Riley

Women in the U.S. Army

Women have served in the Army in various and valuable ways for decades, whether servicing trucks during World War II, tracking patients and paperwork in an evacuation hospital in Vietnam or directing a convoy of armored vehicles as an MP. They prove their capabilities and eagerness to prepare by participating in training exercises such as Reforger '85 or helping maintain a vehicle repair operation during Bright Star '94. Women continue their tradition of dedicated service in today's conflicts. As versatile as the times necessitate, some change roles, like SPC Crisma Albarran, who volunteered to serve a second deployment in Iraq as a Black Hawk door gunner after an initial stint there as a petroleum supply specialist.

U.S. Army/SSG Jeff Lowry

U.S. Army/SPC Nathan Goodall

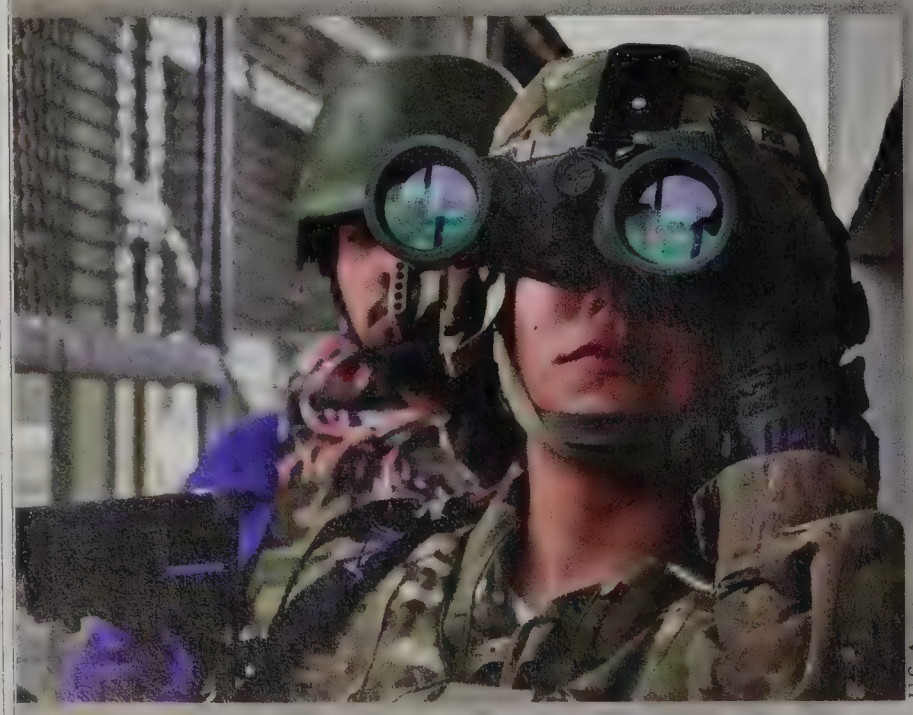
Left, SSG Samira Abdullah-muhammad of the 40th Engineer Battalion, 170th Infantry Brigade Combat Team, gives a high-five to a child during a mission to deliver medical supplies to a clinic in Deh Dadi. Right, CWO-4 Anne Wiley (left), the senior standardizations instructor pilot for 7th Squadron, 17th Cavalry Regiment, and CPT Carmel Cammack, an assistant operations officer for the unit, prepare to reposition an aircraft at Kandahar Air Field.

U.S. Army/SFC Stephanie L. Carl

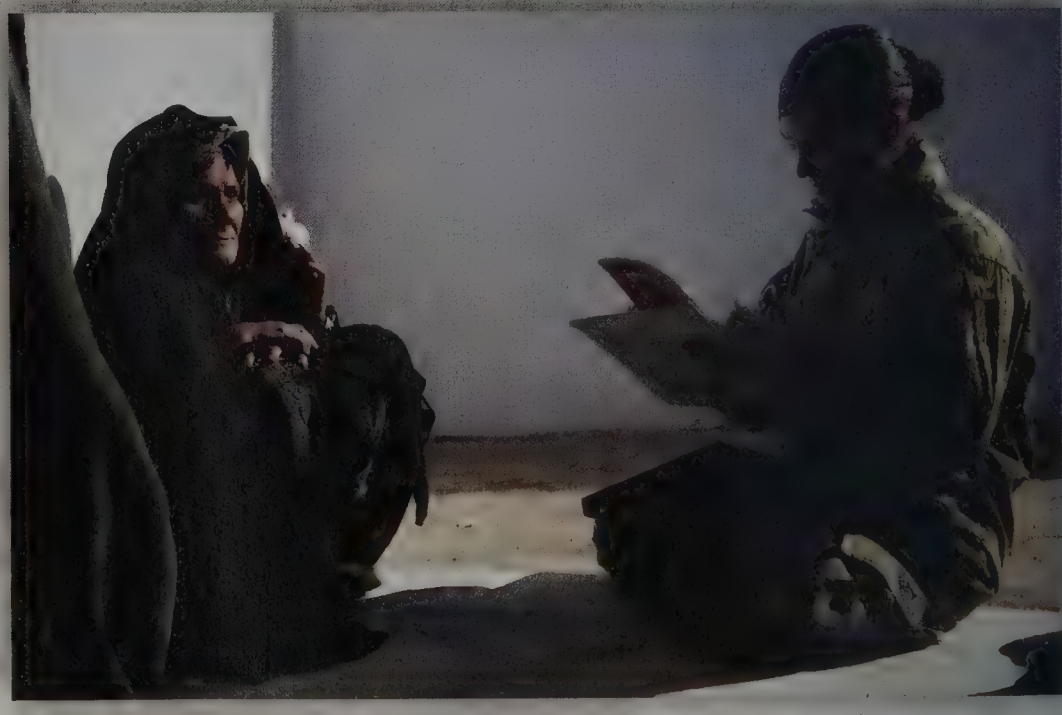
Women in the U.S. Army in Afghanistan

U.S. Army/SPC Kristina Truluck

U.S. Army/1LT Joseph McDaniel



U.S. Army



U.S. Army/SPC Kristina Truluck

Clockwise from top left, MAJ Megan Childs, 10th Mountain Division, checks the heart rate of a local Afghan woman at the Dasht Camp, Kandahar Province. MAJ Childs was providing basic medical aid to local women and children during Operation Spartan Stork last summer. PFC Sierra Streacker of 25th Infantry Division's Company F, 2nd Battalion, 5th Infantry Regiment, interacts with children in Ghazni Province late last year. SGT Lidya Admounabdfany of 3rd Brigade, 10th Mountain Division's Female Engagement Team meets with a local woman at the Woman's Center near the Zhari District Center in Kandahar Province late last year. The Female Engagement Team distributed blankets and winter clothing to women and their families. SGT Jaclyn Guzman maintains visual surveillance as shots are fired and explosions erupt from a building in Kabul during an insurgent attack on the International Security Assistance Force Afghanistan headquarters and the U.S. Embassy in Kabul last fall.

Celebrating Freedom...

and Those Who Defend It.

Poongsan Corporation salutes members of the U.S. armed forces for your service and sacrifice. Like you, we recognize that eternal vigilance is the price of freedom, and to preserve peace, we must stand ready to defend it.

A supplier of military munitions with four decades of experience, ultra-modern technology and a commitment to setting a new global standard for product quality, Poongsan supports your mission of defending freedom, wherever it is threatened. We are dedicated to advancing human progress through superior products, exceptional people and uncompromising service.

That's the Poongsan way.

POONGSAN

www.poongsan.co.kr

Delivering the network.

Introducing the Harris AN/PRC-152A. Keeping the frontline connected.

Dismounted troops send data with secure wideband

Squad leaders network up and down the command chain

Company commanders connect on the move

Battalion leaders assess in real time, clear to engage

The world's first handheld radio with both Type-1 wideband networking and narrowband interoperability. The NSA-certified Harris AN/PRC-152A gives today's warfighters secure access to voice, video, and data. Learn how Harris delivers the network to all echelons of the battlefield at Harris.com/Delivers

harris.com

HARRIS®

assuredcommunications®

Education Periodicals
non-circulating]
355.05 UNC
v. 62, no. 4 (2012 Apr)
PERIODICAL
A

e Association of the United States Army

ARMY

April 2012 www.ausa.org $3.00

|''''||'|'|''''|||''''||'||'||'||''''|||''''||'|'||'|'|

*********AUTO**3-DIGIT 618
116399 20120531 20120401
ACQUISITIONS DEPT.C0333593 0001
ACQUISITIONS DEPT.C0333593 00162I
1408 W GREGORY DR P0000I0
URBANA IL 6180I-3607 0I:02352S

Building on unprecedented performance, the Bell OH-58 Block II is the definitive solution for the 21st Century Scout. Netting billions of dollars in taxpayer savings, the Block II solution allows both industry and the Army the resources needed to invest in future S&T projects like FVL. Flying high/hot at max gross weight, the Bell OH-58 Block II is the fastest-fielding, lowest-cost solution available. The Bell OH-58 Block II. American ingenuity for America's soldiers. *On a Mission.*

- 6k/95 Performance at Max Gross Weight
- 800,000+ Combat Flight Hours by the Kiowa Warrior
- Highest OPTEMPO and Readiness Rates by the Kiowa Warrior
- Fielded Level II MUM-O

Bell Helicopter
A Textron Company

www.ScoutsOut.com

© 2012 Bell Helicopter Textron Inc.

1-800-FLY-BELL | bellhelicopter.com |

ARMY MAGAZINE

APRIL 2012
VOL. 62, NO. 4

PUBLISHED BY THE ASSOCIATION OF THE U.S. ARMY

www.ausa.org

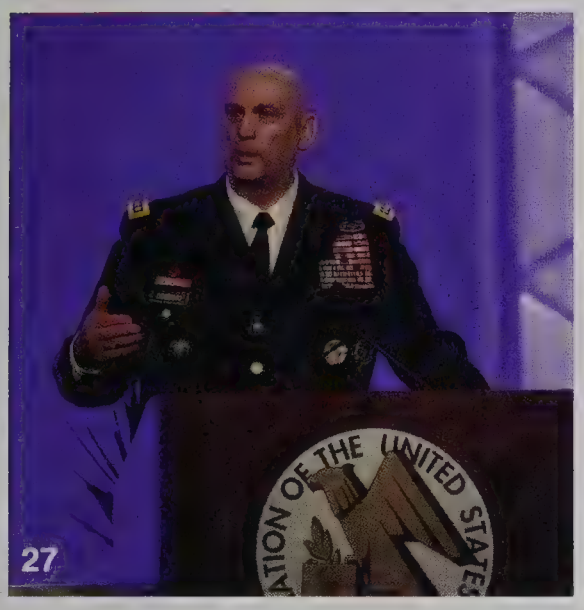
FRONT & CENTER

Retrenchment
By GEN Frederick J. Kroesen, USA Ret.
Page 21

Food for Thought for Battalion and Brigade Commanders: Developing Leaders in Garrison
By LTG James M. Dubik, USA Ret.
Page 22

Answering the Question: An Army for What?
By Richard Hart Sinnreich
Page 24

FEATURES



27

America's Army: The Nation's Force of Decisive Action
By GEN Raymond T. Odierno, Chief of Staff of the Army
Tasked with enabling the Joint Force of 2020 amid a global financial crisis, today's Army, says the Chief of Staff, is up to the challenge.
Page 27

34

The FY 2013 Budget: Ups and Downs in Cutting Back and Moving Forward
By Dennis Steele
The Army's fiscal year 2013 budget request will allow key modernization and reset programs to continue, but it sets the stage for future personnel cuts.
Page 34

42

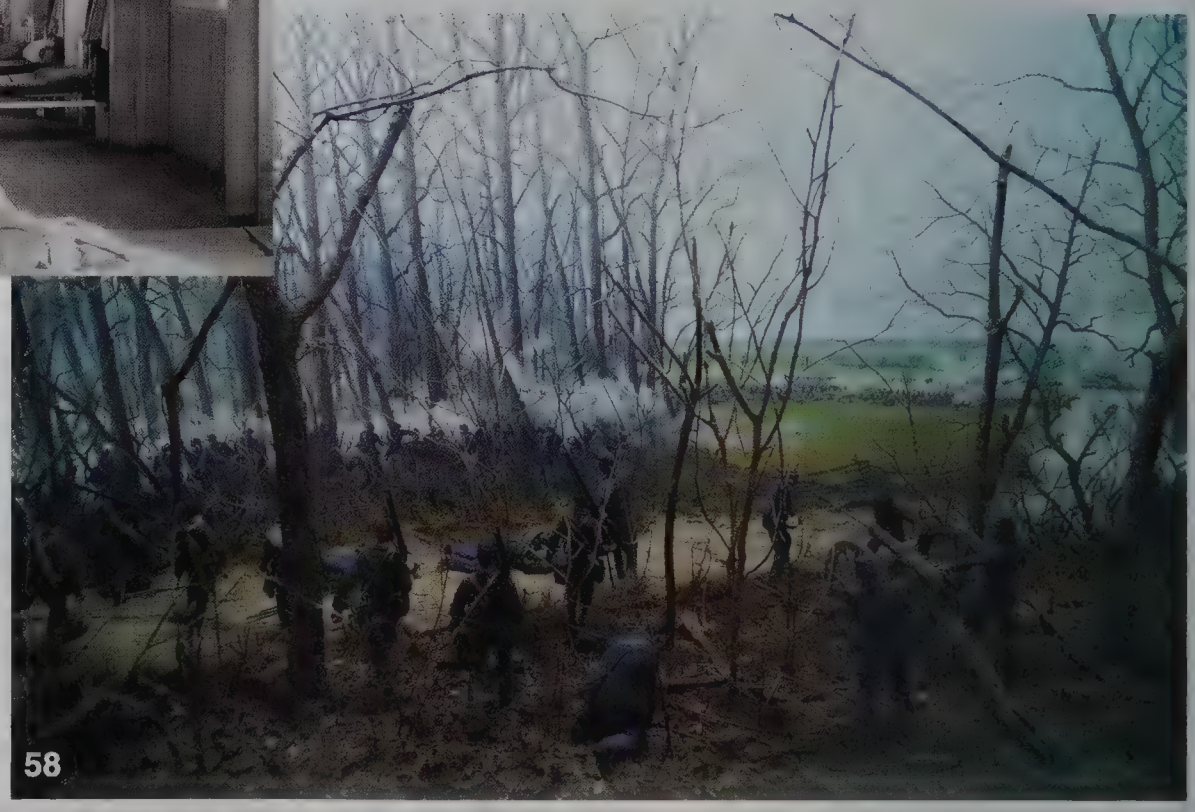
My Longest Day
By LTC William P. Baxter, USA Ret., as told to COL Francis R. Stevens, USA Ret.
A former senior advisor to the Army of the Republic of Vietnam recalls his first day of combat, an eight-hour battle that left him "astounded to be alive."
Page 42

ARMY CONTENTS continued

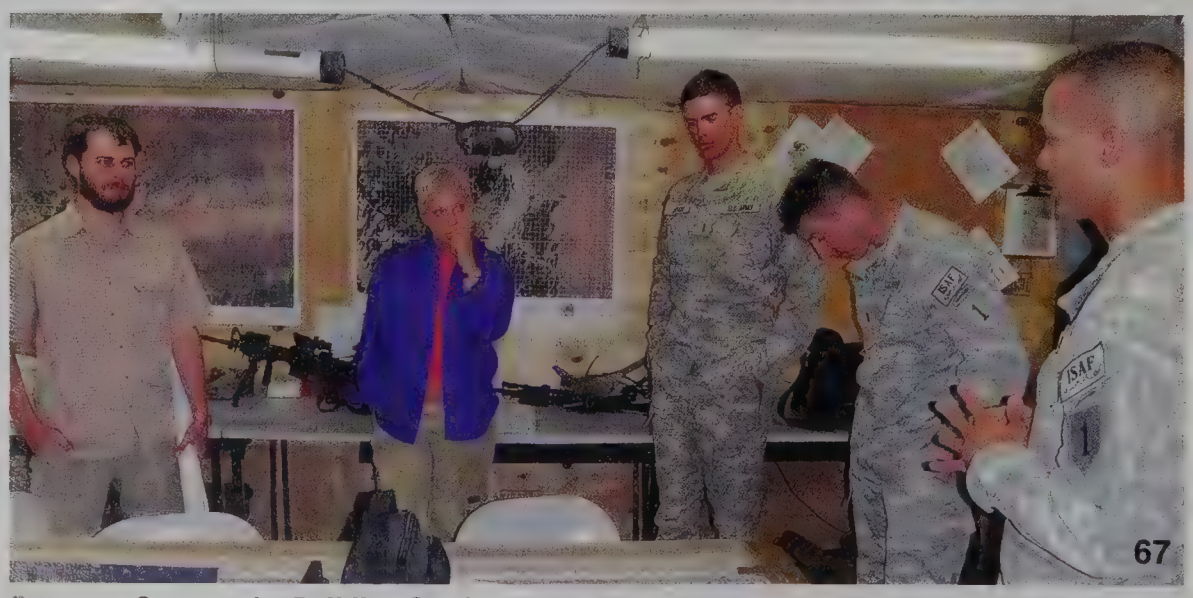
Establishing 'VICTORY' Architecture Standards
By Scott R. Gourley
The Army's newest acronym stands for a specific set of standards and protocols designed to make future integration of parts and software far less problematic.
Page 51

54

You Might Be an Old Soldier If...
By MG Guy S. Meloy, USA Ret.
Recollecting names of things, Army "fashion," Army style and Army standard issue serves as a road map for a trip of total nostalgia.
Page 54


58

Strong Personalities and Scarred Reputations at Shiloh
By Dennis Steele
Civil War Sesquicentennial: An eclectic cast of senior Confederate officers faced off against a cadre of strong-willed Union generals at the Battle of Shiloh/ Pittsburg Landing, Tenn.
Page 58


67

Company Command—Building Combat-Ready Teams: Tips for Working Effectively with our JIIM Partners
Experienced company commanders share their tips for working effectively when partnered in theater with joint, interagency, intergovernmental and multinational people and organizations.
Page 67

DEPARTMENTS

Letters 4
Advertisers in This Issue 6
Washington Report 8
News Call 11

Sustaining Member Profile 72
Soldier Armed 73
Reviews 77
Historically Speaking 86

HAVE AN EDGE
ON THE EDGE.
DRS provides soldier systems that optimize sustainment, situational awareness, target acquisition, hand-held computing, communications and network services. All to help give warfighters an edge. No matter where they are.
Empowering The Warfighter. That's Go To.
DRS.com/edge
DRS
TECHNOLOGIES
A Finmeccanica Company

GEN Gordon R. Sullivan, USA Ret.
President, AUSA
LTG Theodore G. Stroup Jr., USA Ret.
Vice President, Education, AUSA

Mary Blake French — *Editor in Chief*
Paul W. Bartels — *Art Director*
Larry Moffi — *Managing Editor*
Dennis Steele — *Senior Staff Writer*
Toni Eugene — *Associate Editor*
Joseph L. Broderick — *Production Artist*
Jeremy Dow — *Assistant Editor*
Katharine Scott — *Assistant Editor*
Jocelyn Wascher — *Editorial Assistant*

Contributing Editors
GEN Frederick J. Kroesen, USA Ret.; LTG James M. Dubik, USA Ret.; and Scott R. Gourley

LTG Thomas G. Rhame, USA Ret.
Vice President, Finance and Administration, AUSA

James E. Burke — *Advertising Manager*
Meagan B. Bailey
Advertising Production Manager

Norman Campbell — *Fulfillment Director*
Valerie Holman — *Fulfillment Manager*

ARMY is a professional journal devoted to the advancement of the military arts and sciences and representing the interests of the U.S. Army. Copyright©2012, by the Association of the United States Army. ☐ **ARTICLES** appearing in ARMY do not necessarily reflect the opinion of the officers or members of the Council of Trustees of AUSA, or its editors. Articles are expressions of personal opinion and should not be interpreted as reflecting the official opinion of the Department of Defense nor of any branch, command, installation or agency of the Department of Defense. The magazine assumes no responsibility for any unsolicited material. ☐ **ADVERTISING**. Neither ARMY, nor its publisher, the Association of the United States Army, makes any representations, warranties or endorsements as to the truth and accuracy of the advertisements appearing herein, and no such representations, warranties or endorsements should be implied or inferred from the appearance of the advertisements in the publication. The advertisers are solely responsible for the contents of such advertisements. ☐ **RATES**. Individual memberships and subscriptions payable in advance (one year/three year): $21/$63 for E1-E4, cadets/OCS and GS1-GS4; $26/$71 for E5-E7, GS5-GS6; $31/$85 for E8-E9, O1-O3, W1-W3, GS7-GS11 and veterans; $34/$93 for O4-O6, W4-W5, GS12-GS15 and civilians; $39/$107 for O7-O10, SES and ES; life membership, graduated rates to $525 based on age; $17 a year of all dues is allocated for a subscription to ARMY Magazine; single copies, $3.00. Additional postage to all foreign countries, $15 per year. For other rates, write Fulfillment Manager, Box 101560, Arlington, VA 22210-0860.

ADVERTISING. Information and rates available from the Advertising Production Manager or our advertising representatives, who are:

The Audit Bureau

James E. Burke and **Irene Lamar**, 230 Park Ave., Suite 1546, New York, NY 10169. (212) 697-2844. FAX (212) 682-1421. Email: advdpt@aol.com.

ARMY (ISSN 0004-2455), published monthly. Vol. 62, No. 4. Subscription $34 a year. Publication offices: Association of the United States Army, 2425 Wilson Blvd., Arlington, VA 22201-3326, (703) 841-4300, FAX: (703) 841-3505, email: armymag@ausa.org. Visit AUSA's web page on the Internet at www.ausa.org. Periodicals postage paid at Arlington, Va., and at additional mailing office.
POSTMASTER: Send address changes to ARMY Magazine, Box 101560, Arlington, VA 22210-0860.

Letters

Naval Supremacy

■ I write to thank BG John S. Brown for the excellent insights in his March "Historically Speaking" article, "Naval Supremacy: How Much Is Enough?" Whenever we face military downsizing after a long buildup, there always is a lot of myopic my-service-is-the-only-necessary-one posturing by representatives of each of the services. His article shows there are some wise people who are able to rise above that and look objectively at the needs of the country as a whole and at what each of the services can do. I appreciate that very much.

I particularly appreciate BG Brown's common sense evaluation of China's position and capabilities. There is a lot of scaremongering going on right now with respect to China. Our nation needs to defend its vital interests and play a constructive role in the Pacific and in Asia, but it doesn't do us any good to exaggerate threats.

MAJ Edward D. Lotterman,
U.S. Army Reserve
Saint Paul, Minn.

Protecting Intellectual Capital

■ The recent release of two Department of Defense documents, "Sustaining U.S. Global Leadership: Priorities for 21st Century Defense" and the accompanying "Defense Budget Priorities and Choices," created a small firestorm in the national security community and media. Pundits either applauded the realism of the new defense strategy and budget or decried the demise of American strength. The Chief of Staff of the Army (CSA), GEN Raymond T. Odierno, accompanied this new strategic guidance by issuing new marching orders and a briefing on the budget impact to the Army.

These documents, statements and briefings all look forward through this decade to the Joint Force of 2020 and account how the Department of Defense and the Army will adjust to both budget and global realities. They emphasize a range of missions in a challenging environment (now focused toward the Asia-Pacific region) and the application of guidance to the force structure and investment (including special operations forces, unmanned air systems, intelligence, surveillance and reconnaissance, and cyber). In the middle of these lists of missions and equipment priorities, however, one strategic imperative may get lost: We must protect and develop the intellectual capital of the force over this decade.

Indeed, the strategic guidance states emphatically: "DoD will manage the force in ways that protect its ability to regenerate capabilities that might be needed to meet future, unforeseen demands, maintaining intellectual capital and rank structure that could be called upon to expand key elements of the force." One of the CSA's priorities in his marching orders is to "adapt leader development to meet our future security challenges in an increasingly uncertain and complex strategic environment."

Those lines tend to get lost in any focus on funds and weapons systems, perhaps because it is easier to measure the cost and expected effect of a weapon than to measure the long-term

This Month's Cover

Army aviation, based on lessons learned in Iraq and Afghanistan, is considered an essential asset and will continue to be upgraded under the reduced fiscal year (FY) 2013 budget request. DoD projects a $487 billion reduction in the defense budget over the next 10 years. Senior staff writer Dennis Steele outlines the FY 2013 budget request on Page 34.

(Cover photographs: Gray Eagle UAS: GA-ASI; others, U.S. Army)

value of professional development.

A few thoughts about the need to capitalize on the potential of intellectual capital may be in order.

■ We have a committed, combat-experienced officer corps, long on counterinsurgency and stability operations experience but growing short on high-intensity combat experience.

■ In the swiftly changing strategic environment, "come as you are" conflicts and missions require that intellectual capital is trigger-ready, not mothballed. The career officer and NCO corps should be the first priority for development.

■ Intellectual capital is the capacity to react to a range of missions and uncertainty. It requires education more than training, because education teaches patterns of thought and inquiry, while training often prepares for specific circumstances.

■ Graduate education, professional schooling and broadening experiences in particular, historically developed the officer corps that won both World War II and Desert Storm.

ARMY Magazine welcomes letters to the editor. Short letters are more likely to be published, and all letters may be edited. Please send letters to The Editor, ARMY Magazine, AUSA, 2425 Wilson Blvd., Arlington, VA 22201. Letters may also be faxed to (703) 841-3505 or sent via email to armymag@ausa.org.

■ We ignore the complicated demands of waging combined arms maneuver at our peril. The professional skills of warfighting at the high end of the conflict spectrum are skills worthy of graduate-level thought. The integration of warfighting functions is hard and can't be learned overnight. We should not wish away the likelihood of high-intensity combat, but should educate and train for it, because its intensity devours the inexperienced or amateur.

We must keep our stability operations acumen, while now restoring the combined arms capacity of the force. As the joint force, with the Army leading, responds to new strategic guidance and budget realities over the course of this decade, we must retain the intellectual capital required to cope with strategic uncertainty.

COL DEAN A. NOWOWIEJSKI,
USA RET., PH.D.
Lansing, Kan.

Channeling George F. Kennan

■ Richard Hart Sinnreich's February article about channeling George F. Kennan was thought-provoking but disturbing. George Kennan's Containment strategy was not "hijacked." By the late 1950s it was painfully obvious to a broad spectrum within the State Department, the Central Intelligence Agency, the Pentagon, as well as political leaders in both parties and allied nations overseas, that economic aid simply would not suffice in turning back the tide of growing Soviet influence around the world—influence that, more often than not, was bought with Soviet-supplied arms. In many parts of the world, an SKS carbine carried more political weight than a sack of Iowa grain. Containment—when

supplemented by U.S. military assistance to our allies—proved to be a winning combination that eventually led to the economic and political collapse of the Soviet Union in 1991.

President Eisenhower's 1961 farewell address was quickly forgotten at the time as the nation's attention turned to the new leadership of a younger, seemingly more dynamic President. It would be resurrected and taken out of context later by those seeking legitimacy for what were, at best, isolationist views and, at worst, those seeking to disparage the very institution and profession Eisenhower served with honor most of his adult life. Keep in mind that John F. Kennedy had just been elected—largely thanks to the perception among the public that the fiscally conservative Eisenhower administration had not kept up with growing Soviet military, political and technological advances. That was not true: No missile gap actually existed, but perception was everything. From the first day of his administration, Eisenhower had been concerned that attempting to match the Soviets tank-for-tank would be prohibitively expensive and would cripple the nation's economy—thereby denying the United States of the economic means of resisting communism, at least in the long term. The 1953 release of National Security Council document 162/2 unveiled a new national security policy, nicknamed the New Look, that would place reliance upon strategic nuclear forces and deter aggression through the threat of massive nuclear retaliation. Eisenhower feared the economic consequences of an arms race, and nuclear weapons offered the most bang for our buck.

At the same time, Eisenhower was an interventionist who supported U.S.-led regime changes in Iran and Guatemala and plans to do the same in Castro's Cuba. After he left office, Eisenhower was an outspoken proponent of U.S. involvement in Vietnam.

Is a military clash between the United States and China inevitable? Hopefully it will not be. The long-feared war with the Soviet Union never took place, but the fact that it did not was not because of a lack of resolve on our part to prepare for and, if necessary, fight such a war if it had.

China has experienced remarkable growth and prosperity since opening to the world in the late 1980s. How long economic interdependence will exist between our two nations is debatable. At some future point her own domestic market will surpass that of the United States as China becomes the world's largest consumer nation. When that happens, how much longer will economics provide a restraining check to nationalistic ambitions? It would be the highest form of irresponsibility for the United States to not be prepared for that day.

For the United States to maintain military forces adequate to deal with an emerging peer competitor is no more evidence of a proclivity for warfare than is maintaining a fire department by a local municipality evidence of a desire for house fires within its community.

Due to the very real threat posed by fundamentalist-inspired terrorism, we have been forced to adopt additional security measures to help ensure the country's safety. These measures have been inconvenient, costly and sometimes invasive, but asking the public to briefly remove their shoes before boarding a commercial aircraft pales in comparison to the sacrifices made by those who have lost their lives in combat or who continue to suffer from grievous, debilitating wounds. Many warriors wish they still had a foot to put into their shoe. Likewise, the cost of incarcerating dangerous people in a single facility needs to be weighed against the mayhem they would wreak upon the world if allowed to roam free and return to terrorism.

Has the global war on terrorism changed our country? Yes, absolutely, but the world has changed as well. Technology and trade have made interaction with other peoples and states an irreversible aspect of life in the 21st century. As tempting as it may appear, we simply cannot live in a vacuum; neither should national defense begin at the water's edge.

Providing for the nation's security is neither easy nor cheap. Military professionals who risk their lives every day in that endeavor know this better than any other segment of our population. New threats to American security have evolved and will continue to do so. In the last 100 years, the United States attempted to coexist and "compose differences" with fascism, communism and radical Islam, but in all cases those efforts came to naught. The events of December 7, 1941; June 25, 1950; and September 11, 2001, are evidence enough.

If we channel anyone, let's channel the spirit of our American warriors who were prepared to make the sacrifices and carry their nation's defense burden for as long as it took. Last year, the opening ceremony of the AUSA Annual Meeting and Exposition featured a performance titled "Perseverance." How appropriate to remember our past when we face such an uncertain future. Whether we remember the Fulda Gap, the DMZ, Fallujah, or the continuing battles in Afghanistan, the examples they have set would serve us all well—no matter what new challenge America may face.

JOSEPH R. DAVIS
Peoria, Ariz.

ADVERTISERS IN THIS ISSUE

ATEC	19
AUSA Annual Meeting	10
AUSA Membership	16
Avon Protection	5
Bell Helicopter	Cover II
Bobcat Company	7
Boeing BDS	Cover III, 31
Cubic Corporation	9
DRS Technologies, Inc.	3
Exelis Visual Information Solutions	15
General Atomics Aeronautical Systems, Inc.	Cover IV
General Dynamics C4 Systems	13
ITT Exelis Electronic Systems	45
Leupold & Stevens	33
Lockheed Martin	41
Meggitt Defense Systems	25
Navy Federal Credit Union	37
Northrop Grumman Corp.	47
RAM Mounts	39
SRC, Inc.	29

ADVERTISING. Information and rates available from the Advertising Production Manager or our advertising representatives, who are:

The Audit Bureau

James E. Burke and **Irene Lamar**, 230 Park Ave., Suite 1546, New York, NY 10169. (212) 697-2844. FAX (212) 682-1421. Email: advdpt@aol.com.

PROTECT TROOPS FROM HARM.

With the new Bobcat® Loader Radio Remote Control System, troops can operate Bobcat loaders without being in the cab. The frequency hopping spread spectrum technology allows troops to control Bobcat loaders within line of sight from up to 500 meters away. The system can be changed from traditional in-cab operation to remote operation in a matter of minutes. The tough, dependable Bobcat loaders provide another solution to adapt to changing threats, do more complicated jobs with fewer soldiers and protect the safety of our troops. Bobcat is delivering on the military's future need for remotely operated vehicles today. Now available through DLA and GSA contracts.

www.bobcat.com/remote **1.877.505.3580**

Bobcat® and the Bobcat logo are registered trademarks of Bobcat Company in the United States and various other countries.
©2012 Bobcat Company. All Rights Reserved. | 834R-6

Bobcat
One Tough Animal

Washington Report

New DoD Policy Opens Thousands of Jobs to Women

The Department of Defense announced in February the opening of more than 14,000 jobs, including more than 13,000 in the Army, to women. The change, pending 30 days of continuous congressional session, opens six military occupational specialties (MOSs) previously closed to women because they were typically co-located with units serving in combat.

The six MOSs are:

- 13M [Multiple Launch Rocket System (MLRS) crewmember]
- 13P [MLRS Operations/Fire Direction Specialist]
- 13R [Field Artillery Firefinder Radar Operator Specialist]
- 91A [M1 Adams Tank System Maintainer]
- 91M [Bradley Fighting Vehicle System Maintainer]
- 91P [Artillery Mechanic]

The changes reflect the realities of serving where there are no firm front lines and recognizes the contributions women have made over the past 10 years. Women will still be banned from serving directly in infantry, armor and special operations units, but the Army will assess changes and continue to make adjustments in women's roles.

A 1994 policy barred women from serving in combat units below the brigade level. DoD has granted a policy exception that opens some 1,200 positions to women at the battalion level in select direct combat units.

Women have been attached to such units previously—and continue to do so—serving as medics and intelligence, communications and logistics officers. The exception means that they will now be formally assigned to the units at the battalion level and will earn the credit for combat service.

Due to the combat exclusion rule, some 280,000 jobs across the services will still remain closed to women, but DoD will review the effects and experiences of the exceptions to policy assignments with an eye to future changes in policy.

With regard to the current provision excluding women from jobs based on physical requirements, the Army and other services are working to develop gender-neutral physical standards based on the tasks soldiers perform on the job.

Once those standards are developed, DoD will evaluate gender-restricted occupational specialties.

Secretary of Defense Leon E. Panetta requested an update in six months on assignment policy implementation and progress made developing gender-neutral standards.

Imminent Danger Pay. A provision in the fiscal year 2012 National Defense Authorization Act that took effect in February mandates that servicemembers will receive imminent danger pay (IDP) only for the actual days they spend in a danger pay location. DoD defines those locations as areas where troops are exposed to physical harm or imminent danger because of civil war, civil insurrection, terrorism or wartime conditions.

Previously, troops were paid the standard $225 monthly IDP stipend even if they performed only one day of the month in an IDP area. Now they will receive $7.50 each day in an IDP area up to the maximum rate. Servicemembers who come under fire irrespective of location are eligible for the full monthly amount of $225 in hostile fire pay, but they cannot receive that pay and IDP in the same month.

The law required proration to begin on December 31, 2011, but DoD was not ready to implement the change on that date and announced it in early February. The announcement notes that some servicemembers may have been overpaid in January and that the military services are working to waive or remit debts for those individuals.

For more information, visit the Defense Finance and Accounting Service Web site at www.dfas.mil/.

Vets Aid VA Research. The Department of Veterans Affairs (VA) is enlisting the assistance of veterans to study how genes affect health.

The voluntary Million Veteran Program (MVP) currently being conducted by the VA Office of Research and Development hopes to collect blood samples and health information from 1 million veterans who receive their care in the VA health system. Information gathered through MVP will be stored anonymously.

Cross-referencing genetic data with health records and information about the lifestyle and military service of participants will allow researchers to study the interactions between their DNA profiles and other data such as exercise, vaccinations and alcohol use. Research will be conducted on diseases such as diabetes and cancer as well as military-related illnesses like post-traumatic stress disorder. The program, which would build the world's largest medical database, could establish new ways to identify, prevent and treat various illnesses and diseases.

Currently 40 sites are enrolling volunteers in the project, and 23,000 veterans have been processed; 30,000 more have agreed to participate. Veterans can withdraw from the project at any time—and for no stated reason—and VA will destroy their genetic material. For more information, visit http://www.research.va.gov/mvp/ or call 866-441-6075.

SPOTLIGHT:

Personnel Locator System

- Proven operational record
- Secure communications between rescue forces and personnel
- Interoperable with multiple survival radios
- High-quality two-way voice and text

FIRST IN INNOVATION

Customers around the world rely on Cubic to deliver advanced systems for high-fidelity training, tactical communications, global asset tracking, and cross-domain cyber security solutions. Cubic provides customers the technology, products and support needed to fight, win and return.

CUBIC

www.cubic.com

9333 Balboa Avenue, San Diego, CA 92123 • 858-277-6780

2012 AUSA

ANNUAL MEETING AND EXPOSITION

A Professional Development Forum

22-24 OCTOBER 2012

Walter E. Washington Convention Center, Washington, DC | www.ausa.org

FOR MORE INFORMATION CONTACT:

AUSA, Industry Affairs

1-800-336-4570 • 703-841-4300 • Fax: 703-243-2589

News Call

Nearly 4,000 Troops Scheduled to Leave Europe

The 170th Infantry Brigade Combat Team (BCT), which began returning to Baumholder, Germany, in January from a year-long deployment to Regional Command-North in Afghanistan, will deactivate in October. Approximately 3,850 soldiers and families will begin moving this summer.

The departure of the 170th follows DoD's February announcement of planned force cuts and relocations in Europe that will reduce the number of U.S. troops on the Continent by 25 percent. In all, more than 11,000 troops will leave Europe by 2017.

In addition to the deactivation of the 170th, the 172nd Infantry Brigade Combat Team, now deployed to Afghanistan, will redeploy this summer to Grafenwoehr and Schweinfurt, Germany. Those soldiers and their families will begin moving in the summer of 2013, and the unit will deactivate in October of that year. Individual soldier training will continue in both brigades, but neither will reset by adding personnel or equipment. The two heavy brigades have not been modernized, and disbanding them will save the Army money as it prepares to downsize by 70,000 soldiers.

Other troop changes in Europe include:

■ The deactivation of V Corps Headquarters in Wiesbaden, Germany, a reduction of about 750 soldiers. V Corps is preparing to deploy to Afghanistan later this year. The soldiers will redeploy to Germany to receive new assignments and reunite with their families, but the unit itself will not return.

■ U.S. Army Europe Headquarters will move from Heidelberg, Germany, to Wiesbaden.

■ Elements of the 173rd Airborne Brigade Combat Team located in Bamberg and Schweinfurt will relocate to Vicenza, Italy. As previously announced, those installations, along with Mannheim and Heidelberg, will close and be returned to Germany.

■ The 2nd Stryker Cavalry Regiment will remain in Vilseck, Germany, and the 173rd Airborne Brigade Combat Team will consolidate in Vicenza. Those two units, according to a DoD spokesman at a Pentagon briefing, have already been modernized and are "cutting-edge" formations.

Although U.S. Army Reserve units based at various locations around Europe may be relocated, the number of units and the soldiers assigned to them are not expected to change. Units remaining in Europe will consolidate at the "enduring communities" of Baumholder, Grafenwoehr, Ansbach, Kaiserslautern and Wiesbaden, in Germany, and in Vicenza.

In an interview with *Stars and Stripes*, U.S. Army Europe commander LTG Mark Hertling said logistics and engineering units from Schweinfurt and Bamberg would move into Baumholder, and that the Army "will try and keep Grafenwoehr at capacity because of the excellent facilities, excellent housing and the training opportunities." Other units will probably be added to the installation.

OEF Deployments. In February, the Army announced a number of deployments to Afghanistan as part of Operation Enduring Freedom. The 2nd Stryker Brigade, 2nd Infantry Division, Joint Base Lewis-McChord, Wash.—more than 4,000 soldiers—will deploy in late spring as part of

U.S. Air Force/SSgt. Eric Harris

Medal of Honor Week. *COL Walter Marm, U.S. Army retired and a Medal of Honor recipient, speaks with soldiers after their training during Medal of Honor Week at Fort Jackson, S.C., in February. The 193rd Infantry Brigade held Medal of Honor Week at the installation to honor Army history and heroes and to give Medal of Honor recipients an opportunity to meet with soldiers and observe training activities.*

the upcoming rotation of forces. In addition, 1,460 active component officers and senior noncommissioned officers and approximately 300 DoD civilians will deploy in 18-person teams beginning this month to help train Afghan National Security Forces.

In a configuration modified to meet the requirement of a new security force assistance mission in Afghanistan, parts of four brigade combat teams (BCTs), one separate brigade and an Army command will deploy between April and August. Parts of the following units will deploy in the modified configuration.

- 2nd BCT, 101st Airborne Division (Air Assault), Fort Campbell, Ky.
- 2nd BCT, 3rd Infantry Division, Fort Stewart, Ga.
- 3rd BCT, 4th Infantry Division, Fort Carson, Colo.
- 4th BCT, 1st Armored Division, Fort Bliss, Texas.
- 162nd Infantry Brigade, Fort Polk, La.
- 1st Army, Rock Island Arsenal, Ill.

Most of the soldiers and leaders not deploying will be reassigned to other units, the majority of them on their respective installations. The rest will focus on schooling, training, gunnery, and equipment maintenance and accountability.

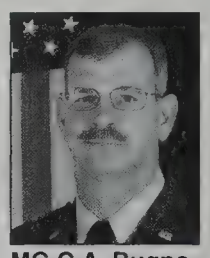
JPAC Returns to Korea. The Joint Prisoner of War/Missing in Action Accounting Command (JPAC) will resume its search for remains of missing U.S. servicemembers from the Korean War. JPAC is returning to North Korea for the first time in seven years.

North Korean military members will assist with logistics, support and security for the recovery mission, which will focus on Unsan County (about 60 miles north of Pyongyang) and an area near the Chosin/Jangjin Reservoir, where the remains of more than 2,000 soldiers and marines are believed to be.

According to DoD's POW/Missing Personnel Office, of approximately 83,000 Americans missing from all conflicts, more than 7,900 are missing from the Korean War, 5,500 of them believed to be in North Korea.

GENERAL OFFICER CHANGES*

LTG R.P. Palumbo from CG, USARAK/ Dep. Cmdr., ALCOM, Fort Richardson, Alaska, to DUSD(I) for J&CWS, Washington, D.C.

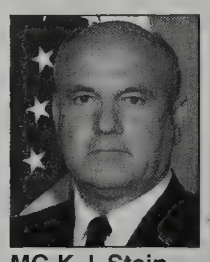


MG C.A. Bugno USAR, from Dep. Cmdr. for Professional Services (TPU), 3rd MDSC, Forest Park, Ga., to CG (TPU), 807th MDSC, Salt Lake City, Utah.

MG L.A. Collyar from Dir., Logistics Ops., DLA, Fort Belvoir, Va., to CG, AMCOM, Redstone Arsenal, Ala.

MG M.J. Lally III from Dir., Ops. and Plans, USTRANSCOM, Scott AFB, Ill., to Asst. Dep. CoS, G-4, USA, Washington, D.C.

MG G.F. Perna from CG, JM&L LCMC/JMC, Rock Island, Ill., to Dep. CoS for Logistics and Ops., AMC, Redstone Arsenal.



MG K.J. Stein from CG, TACOM, Warren, Mich., to CG, 1st TSC, Camp Arifjan, Kuwait.

MG M.J. Terry from CG, 8th TSC, Fort Shafter, Hawaii, to CG, TACOM, Warren.

MG L.D. Wyche from Dep. CoS for Logistics and Ops., AMC, Redstone Arsenal, to CG, CASCOM and SCoE, Fort Lee, Va.

Brigadier Generals: **E.F. Dorman III** from Mil. Asst. to the Cmdr., ISAF, OEF, Afghanistan, to Dir. for Logistics Ops., Readiness, Force Integration and Strategy, ODCS, G-4, USA, Washington, D.C..; **D.A. Gamble** from Dir. for Strategy and Integration, ODCS, G-4, USA, Washington, D.C., to Dep. CG, ASC, Rock Island, Ill.; **S.R. Lyons** from Dir. for Logistics Ops., Readiness, Force Integration and Strategy, ODCS, G-4, USA, Washington, D.C., to CG, 8th TSC, Fort Shafter, Hawaii; **T.M. O'Brien**, USAR, Cmdr. (TPU), 300th MP Bde. (I/R), Inkster, Mich., to CG (TPU) 311th SC(E), Los Angeles, Calif.; **K.G. O'Connell** from Dir. for Logistics, Engineering and Security Assistance, J-4, USPACOM, Camp H.M. Smith, Hawaii, to CG, JM&L LCMC/JMC, Rock Island; **S.M. Twitty** from Dep. CG (Ops.), 1st Armored Div., Fort Bliss, Texas, to Dep. CoS, Communications, ISAF, OEF; **J.F. Wharton** from Dep. CoS, AMC, Redstone Arsenal, to CG, ASC, Rock Island; **D.K. Williams** from Cmdr., DLA, Land and Maritime, Columbus, Ohio, to Dep. CoS, AMC, Redstone Arsenal.

■ ***ALCOM***—*U.S. Alaskan Cmd.;* ***AMC***—*U.S. Army Materiel Cmd.;* ***AMCOM***—*U.S. Army Aviation and Missile Cmd.;* ***ASC***—*U.S. Army Sustainment Cmd.;* ***CASCOM***—*U.S. Army Combined Arms Support Cmd,;* ***CoS***—*Chief of Staff;* ***DLA***—*Defense Logistics Agency;* ***DUSD(I)***—*Deputy Under Secretary of Defense (Intelligence);* ***I/R***—*Internment and Resettlement;* ***ISAF***—*International Security Assistance Force;* ***J&CWS***—*Joint and Coalition Warfighter Support;* ***JM&L LCMC/JMC***—*Joint Munitions & Lethality, Life Cycle Management Cmd./Joint Munitions Cmd.;* ***MDSC***—*Medical Cmd. (Deployment Support);* ***MP***—*Military Police;* ***ODCS***—*Office of the Deputy Chief of Staff;* ***OEF***—*Operation Enduring Freedom;* ***SC(E)***—*Sustainment Cmd. (Expeditionary);* ***SCoE***—*Sustainment Center of Excellence;* ***TACOM***—*U.S. Army Tank-Automotive and Armaments Cmd.;* ***TPU***—*Troop Program Unit;* ***TSC***—*Theater Sustainment Cmd.;* ***USAR***—*U.S. Army Reserve;* ***USARAK***—*U.S. Army Alaska;* ***USPACOM***—*U.S. Pacific Cmd.;* ***USTRANSCOM***—*U.S. Transportation Cmd.*

*Assignments to general officer slots announced by the General Officer Management Office, Department of the Army. Some officers are listed at the grade to which they are nominated, promotable or eligible to be frocked. The reporting dates for some officers may not yet be determined.

For additional information about worldwide recovery and identification efforts, visit http://www.jpac.pacom.mil/.

RFP Issued for JLTV. In January the Army issued a request for proposal (RFP) for the engineering and manufacturing development (EMD) phase of the Joint Light Tactical Vehicle (JLTV) program, a major Army-Marine Corps acquisition program for a new-generation, multimission light vehicle family that will replace a portion of the Humvee fleet. The JLTV family of vehicles will offer better crew protection and performance than do the Humvees.

Following the submission of proposals, subject matter experts from across DoD will convene to review them. The

Agile.

Delivering a single network to all functional areas of the battlefield, even the most remote locations. That's our top priority at General Dynamics. We are working smarter and with more agility to deliver systems and products integrated to support the Joint Force so that Soldiers can more safely and effectively execute their missions.

To learn more, visit **www.gdc4s.com/army**

©2012 General Dynamics. All rights reserved.
Photo credits: Staff Sgt. Jacob N. Ba[illegible] U.S. Army.

GENERAL DYNAMICS

A U.S. Army and U.S. Marine Corps Joint Light Tactical Vehicle team conducts a helicopter sling-load transportability test during the technology development phase last spring.

U.S. Army

Army plans to award up to three contracts this summer for the delivery of 22 prototype vehicles for every contract. The upcoming EMD phase will afford contractors a 27-month period of performance, but the full phase will include an additional six months to allow time for review and smooth progression to the next stage.

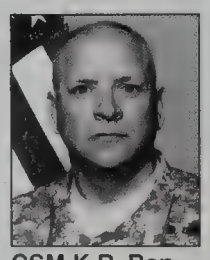
The 27-month technology development phase for the JLTV was successfully completed in spring of 2011. It provided both services information necessary to agree on a common base requirement for the vehicle and a streamlined acquisition schedule that will drive down costs and expedite delivery.

Last Iraq Casualty. In late February, the armed forces medical examiner at the Dover Port Mortuary in Dover, Del., positively identified the remains of SSG Ahmed K. Altaie, of Ann Arbor, Mich., the final missing soldier casualty to be recovered from the Operation Iraqi Freedom/New Dawn mission. SSG Altaie, assigned to the Provincial Reconstruction Team, Division Training Center, Special Troops Battalion, 4th Infantry Division, Fort Hood, Texas, was declared "missing-captured" after his disappearance in Baghdad, Iraq, in October 2006.

Robotic Prosthetic. A new robotic limb, which provides 22 degrees of motion and a wrist that can turn 180 degrees, will soon enable wounded warriors to return to duty. The modular prosthetic limb, with nearly human-like dexterity, is funded by the Defense Advanced Research Projects Agency's (DARPA) Revolutionizing Prosthetics project. The arm was developed by the Johns Hopkins University Applied Physics Laboratory in Laurel, Md., and other organizations.

Wearers can complete a wide range

COMMAND SERGEANTS MAJOR CHANGES*



CSM K.R. Benson from 1st BCT, 101st Airborne Div., Fort Campbell, Ky., to USATC&FJ, S.C.

Photographs currently unavailable: **CSM G. Arnold** from USAG Daegu, Korea, to U.S. Army CBRN School, Fort Leonard Wood, Mo.; **CSM G.L. Tyce** from 160th Signal Bde., Camp Arifjan, Kuwait, to 5th Signal Cmd., Germany.

■ ***BCT**—brigade combat team; **CBRN**—Chemical, Biological, Radiological and Nuclear; **USAG**—U.S. Army Garrison; **USATC&FJ**—U.S. Army Training Center and Fort Jackson.*

*Command sergeants major positions assigned to general officer commands.

Army Casualties in Afghanistan

The following U.S. Army soldiers were reported killed supporting Operation Enduring Freedom from February 1 to February 29, 2012. All names have been released through the Department of Defense; families have been notified.

SGT Joshua A. Born, 25
CPL Timothy J. Conrad Jr., 22
PFC Cesar Cortez, 24
BG Terence J. Hildner, 49
MAJ Robert J. Marchanti II, 48
SGT Allen R. McKenna Jr., 28
SGT Jerry D. Reed II, 30
SFC Billy A. Sutton, 42

EXELIS

Visual Information Solutions

Create Situational Awareness.
Deliver Mission Critical Imagery.
Customize GEOINT Applications.

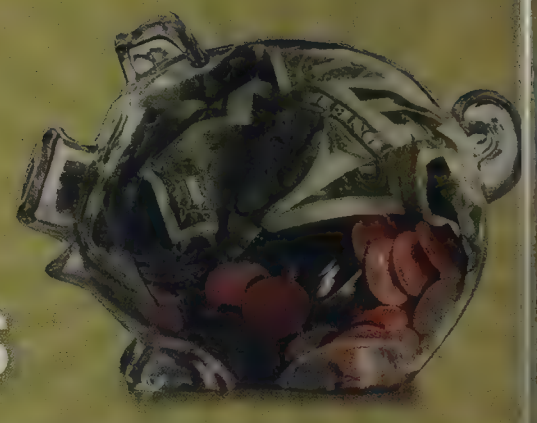
Exelis Visual Information Solutions provides superior geospatial software solutions to help defense, intelligence and security professionals create important situational awareness. Whether you need to perform hyperspectral image exploitation to reveal camouflaged enemy targets, deliver up-to-date GEOINT to mobile devices for the forward deployed, or create custom tools to support image analysts in theater, Exelis Visual Information Solutions has a solution to support your specific mission needs.

Learn more about our products and services at **www.exelisvis.com**

ENVI | E3De | IAS | Professional Services

All rights reserved. ENVI and IDL are trademarks of Exelis Inc. All other marks are property of their respective owners. ©2012 Exelis Visual Information Solutions, Inc.

AUSA
Membership Benefits



Bank of America, N.A.:
AUSA Bank Card
Start receiving great rewards and show your support for AUSA. Call 866-438-6262.

Institute of Land Warfare:
ILW offers writing programs; conducts conferences and symposia; publishes essays, Defense Reports, newsletters; and provides research on defense issues. Call 800-336-4570, ext. 4630 for details.

AUSA Mastercare Group Insurance Plans:
- Active Duty & Retiree TRICARE Supplement
- Accidental Death and Dismemberment Plan
- 10-Year Level Term Life Insurance Plan
- Group Term Life Insurance Plan
- Short-Term Recovery Plan
- Long Term Care Plan

Call 800-882-5707 for more information.

Dental and Vision Discount Plans:
Discounts offered to AUSA members on dental services and vision exams.

This plan is not available in the states of MT and VT.

Emergency Assistance Plus:
If you or a family member gets injured or sick while on travel this plan will provide medical assistance, bring a medical specialist or loved one to your side and much more. Call 888-633-6450 for more information.

Government Vacation Rewards:
AUSA now offers its members discounts on cruises, resorts and tour providers. 866-871-9181

GEICO Insurance – Auto, Home, Condo/Renters, and Boat:
In states where available, a special member discount may apply. Call 800-861-8380.

Apple Member Purchase Program:
Apple Computers offers AUSA members a substantial savings on its computers. Call 800-MY-APPLE and mention you are a member of AUSA.

Book Program:
Members receive discounts on selected military books.

Army Times/Federal Times:
Subscription discounts on Army Times/Federal Times. Call 800-368-5718.

Dell Member Purchase Program:
AUSA members can now receive discounts on Dell PCs.

AUSA Career Center:
AUSA members can now post their resumes and employers can advertise any new openings they have. Visit our Web site and go to the Resources drop-down, then Career Center.

University of Maryland University College (UMUC):
University of Maryland University College (UMUC) is pleased to offer undergraduate and graduate study programs to AUSA members worldwide. For some program participants, a discounted tuition rate will apply.

Armed Forces Services Corporation:
AFSC guides you through the details on military entitlements for your retirement and survivor planning/assistance for your spouse. Call or e-mail: 888-237-2872, info@AFSC-USA.com.

Choice Hotels International®:
AUSA members can receive discounts on hotel rooms at the following hotels.
- Comfort Inn®
- Comfort Suites®
- Quality®
- Sleep Inn®
- Clarion®
- Cambria Suites®
- MainStay Suites®
- Suburban Extended Stay Hotel®
- Econo Lodge®
- Rodeway Inn®

Call 800-258-2847 and use the code 00800700.

Car Rental Program:
Use the reservation codes on the back of your membership card and save at:
- AVIS 800-331-1441
- Budget 800-455-2848
- Alamo 800-354-2322 *(rental for under age 25 available)*
- Hertz 800-654-6511
- National 800-Car-Rent

Publications:
- *ARMY* Magazine every month, including the October *ARMY Green Book*.
- *AUSA NEWS* every month.

Member discounts and services are subject to change.

For more detailed information visit Members Only Benefits and Services at www.ausa.org.

AUSA Member Support Call Center 855-246-6269 or 703-841-4300, press #2

Johns Hopkins University Applied Physics Lab

Funded by Defense Advanced Research Projects Agency's Revolutionizing Prosthetics program, the modular prosthetic limb will allow amputees to return to service.

of normal activities formerly limited by old prostheses, including shoveling snow, throwing a ball, playing golf, playing the trumpet and cooking. The arm contains a small, surgically implanted wireless device that integrates the prosthesis to the brain so that the wearer can directly control it by thought processes, just as a real arm is controlled.

The robotic arm is now moving through the Federal Drug Administration approval process. DARPA's goal for the next decade is to create a fully functioning upper limb that responds to neural control by the brain.

VA Benefits Online App. The Department of Veterans Affairs (VA), partnered with 1st Army at Camp Shelby, Miss., will launch a new streamlined version of its online enrollment application for health benefits (VA Form 1010EZ) at demobilization sites nationwide.

Designed for servicemembers returning from deployment, it was tested in a pilot program as part of the demobilization process at Camp Shelby. "The new, online system noticeably reduces the paperwork and reduces a 10-day process to three days," said Secretary of Veterans Affairs Eric K. Shinseki in the announcement of the new enrollment application.

Enrolling in the VA health-care system is part of a servicemember's demobilization, and the application can be completed using the online form during a regularly scheduled briefing on VA benefits for all servicemembers. Applying for VA health benefits right away is important because recently discharged combat veterans are eligible for five years of free care and medicine for conditions potentially related to combat service.

For more information, visit VA's Web site at www.va.gov/healthbenefits or call 1-877-222-8387.

Fuel-Saving. An Army-Air Force team, with the lead at the Army's Natick Soldier Research, Development and Engineering Center in Natick, Mass., is striving to reduce fuel consumption in base camp shelters by 50 percent over the next three years. As the lead of the joint team searching for ways to make shelter systems more fuel efficient, Amy Klopotoski estimates the cost savings in shelter systems could add up to $550 million a year, based on a projected fuel rate of $15 a gallon.

The team's first step is to take existing technologies, such as solar shades, thermal insulation, environmental control units and energy-efficient lighting, improve or strengthen them as

LTG Dubik Named to Bradley Chair

LTG James M. Dubik, U.S. Army retired, was recently named the next General Omar N. Bradley Chair in Strategic Leadership, a position shared by the U.S. Army War College, Dickinson College, and the Penn State University's Dickinson School of Law and School of International Affairs. A frequent contributor to ARMY Magazine and a senior fellow at the Association of the U.S. Army's Institute of Land Warfare, LTG Dubik is a former commander of Multi-National Security Transition Command-Iraq and served in the Army nearly 40 years. He will succeed Philip J. Crowley, former U.S. Assistant Secretary of State for Public Affairs.

Athletic Honors *were presented at AUSA's Winter Symposium in Fort Lauderdale in February. Left to right: GEN Ann E. Dunwoody, Commanding General, U.S. Army Materiel Command; GEN Robert W. Cone, Commanding General, U.S. Army Training and Doctrine Command; 2011 Coach of the Year LTC Liam Collins; 2011 Female Athlete of the Year CPT Danielle Cook; 2011 Male Athlete of the Year 1LT Charles Ware III; and Army Chief of Staff GEN Raymond T. Odierno.*

necessary, and test them in theater. Klopotoski believes such measures could cut energy use in base shelters by 25 to 30 percent. She hopes further technological refinements and advances over the next couple of years will achieve the additional reduction necessary to reach the 50 percent goal, and she recognizes the end product must be in a form soldiers in the field can use. It must be durable, portable and lightweight. The team's output will be tested in fiscal year 2014 by soldiers and airmen in theater as well as in the continental United States.

Army Energy Savings. Renewable energy is here, and the Army expects to save more than $110 million because of it. In addition, energy savings performance contracts at White Sands Missile Range, N.M.; Fort Bliss, Texas; and Fort Buchanan, P.R. (including 11 Army Reserve centers there) will save 267 billion BTUs (British Thermal Units) each year and will provide 8.2 megawatts of renewable power capacity.

The project at White Sands Missile Range will be the largest renewable energy project the Army has executed yet—more than twice the size of the Army's current largest solar array at Fort Carson, Colo. The White Sands project will generate more than 10 percent of the installation's electricity by the end of this year. The $16.8-million contract will save 10 million kilowatt hours of electrical energy and $930,000 annually.

At Fort Bliss, Texas, 5,500 solar panels and other energy-saving measures of a $16-million project will generate about 2.2 million kilowatt hours of energy each year and will save $42 million over a period of 25 years.

On the island of Puerto Rico, the use of wind and solar photovoltaic systems, as well as other energy-conservation measures, will save the Army more than $65 million over the life of the 16-year contract.

All three contracts support the Army's goal of producing 25 percent of its utility energy needs from renewable energy sources by 2025 and its effort to use private investment capital to attain its energy goals.

Hawaii Tops in Conservation. U.S. Army Garrison-Hawaii has earned the Secretary of the Army's 2011 Natural Resources Conservation Team Award for the accomplishments of its Oahu Natural Resources Team (NRT).

The Oahu NRT supports six military ranges on the island and manages more than 60 federally listed species on more than 50,000 acres of land. Some 20,000 servicemembers, including the National Guard and Army Reserve, as well as local law-enforcement officials, conduct training missions on the ranges, which are home to numerous types of plants and wildlife, including some endangered species.

During 2010 and 2011, the Oahu NRT collected 5,800 endangered plants for genetic storage, reintroduced 8,500 endangered plants to their native habitat and fenced more than 1,200 acres of endangered species habitat to prevent its destruction.

The Oahu NRT and the eight other winners of the Secretary of the Army's Environmental Awards will represent the Army in the Secretary of Defense Environmental Awards competition this spring.

The winners will be announced at a Pentagon ceremony in June. ★

BRINGING MORE POWER TO THEIR MISSION

Army troops in the fight for freedom deserve the best support we can offer. The Army Improved Turbine Engine Program (ITEP) will make sure they get it — specifying new combat performance, capability and efficiency standards for Black Hawk and Apache helicopters. ATEC's HPW3000 engine will provide increased power, enhanced dependability, Start capability, increased payload, and improved high/hot performance. With greater range. Burning less fuel. Saving billions of dollars.

ATEC

Honeywell

Pratt & Whitney
A United Technologies Company

ASSOCIATION OF THE UNITED STATES ARMY

USA PAVILION

AT SOFEX 2012

7 - 10 MAY 2012

Book Your Space Now for the USA Pavilion

For USA Pavilion information and stand booking contact:

LexaLynn Hooper
Manager, USA Pavilion
T: +1 703 907 2666
E: lhooper@ausa.org

Amy Frankenstein
Sales, USA Pavilion
T: +1 703 907 2413
E: afrankenstein@ausa.org

www.ausa.org

SOFEX JORDAN

ASSOCIATION OF THE UNITED STATES ARMY

U.S. COMMERCIAL SERVICE
United States of America
Department of Commerce

Front & Center

Retrenchment

By GEN Frederick J. Kroesen
U.S. Army retired

Among today's soldiers are the field grade officers and the junior noncommissioned officers who will be leading the Army a decade from now when the retrenchment of the force in being will have survived the reductions mandated by the budgetary decisions already announced. Those include reductions in manpower and dollars now programmed that will provide only a high-risk size and structure and a smaller worldwide Army influence. Still unprogrammed are the effects of the air-sea battle strategy now adopted and the sequestration of billions that the Secretary of Defense has described as calamitous and unacceptable but which are a requirement of current law. Many in Congress have asserted that they will pass correcting legislation to avoid sequestration, but President Obama is on record stating that he will veto any such attempt.

Our leaders of the future will have little to say about forming what they inherit. They will have everything to do with leading and managing the resources of their time, and it is for those tasks that today's leaders must prepare them. And today's leaders have promised that their inheritance will be a professional, fully trained-and-ready force, still the most powerful land army in the world.

The Secretary of Defense has emphasized that "we need today's generation of battle-hardened soldiers and thoughtful leaders who know the face of modern warfare to help build our future force."

Chairman of the Joint Chiefs of Staff GEN Martin E. Dempsey and Army Chief of Staff GEN Raymond T. Odierno want leaders who are professionally qualified, who can establish and maintain disciplined units and organizations dedicated to mission accomplishment, and who create trust and esprit de corps among soldiers, families and the American people.

The task is not new; the Army has experienced the same traumatic demand after almost every war—and sometimes during political or economic crises that were seen as reason to accept greater risks in defense capabilities. Missile defense, modern field artillery and not increasing the size of the Army to fight the last two wars are recent examples of economic decisions dominating military judgment.

During past periods of limited resources the Army has always had a nucleus of leaders dedicated to keeping faith with the purpose of the Army, leaders who provided the intellectual competence for evolving the tactics, strategy and preparation for the next war. That nucleus must be sustained among soldiers whose professional competence has been limited, curtailed by the erosion and forced neglect of the Army education system. There is no argument that immediate operational needs command priority over all else during wartime, but if we are resigning from our wars, the restoration of the education system deserves a high priority in our preparations for the future. It is a keystone of the professionalism our current leaders are calling for.

Maintaining a disciplined force depends on adherence to standards of organization, training and recognition of the threats we must be prepared to defeat. Future leaders must know how to set standards, establish training requirements and recognize the changes required by the threats to our national interests as they evolve.

The establishment and sustainment of trust is by far the most critical demand placed on leaders, both current and future. The combat soldiers' dilemma is a problem of trust, one that confuses soldiers about their responses in a stressful situation.

Trust is a value that is a two-way requirement, but its initial thrust must be from senior to junior leaders. When a sergeant is directed to train the members of his squad, to create confidence among his soldiers in their abilities and in each other, and to form a team that can accomplish a squad's missions, he deserves the authority to make decisions and take actions appropriate for squad activities and operations. In turn he trusts that his platoon leader and company commander will stand with him, agreeing with his decisions or counseling and advising him regarding his judgment and accepting his honest mistakes as learning experiences. A chain of command that functions in this manner, between captains and lieutenants, between brigade and battalion commanders, and between commanders and their staffs creates the foundation of trust throughout a command. It also breeds trust and confidence among soldiers in their units as they accomplish tasks, meet standards and satisfy mission requirements. It creates the loyalty and esprit de corps that identify the finest units and organizations.

Family satisfaction is an almost equal trust factor. If soldiers and their spouses are not satisfied that their families are adequately housed, their children properly schooled and entertained, their communities secure and well-provisioned, trust in the Army as an institution suffers and enthusiasm for an Army career wanes, perhaps dies. That trust has been strained during the past decade as family life has suffered the separations required by multiple and repetitive combat tours.

Whether or not there is a problem of trust in the Army is up to others to decide, but an email from a combat soldier in Afghanistan, commenting on the article "The Combat Soldiers' Dilemma" (January "Front & Center") which decried the impact of legal re-

strictions on commanders, stated: "It's not the lawyers and the regulations, it's the commanders who plaster bulletin boards and bunker walls with CYA guidance, directives, rules, cautions, SOPs, etc., that specify how to handle almost everything they can think of happening. They require prior approvals, they stymie initiative, they delay actions and they deny any trust in the judgment of their subordinates." He went on to say, "I can't even fire an illumination round without a clearance from my battalion commander."

The need for committed and dedicated leaders who will see the Army through the coming years has never been greater, but confidence that they are among those now in service is almost guaranteed by the history of the institution. For every crisis, for every traumatic period, we have produced leaders—trained and prepared by the Army system—who were quite capable of stepping into the breach. Today, soldiers who willingly join that group will deserve sympathy during the struggles ahead. They cannot be promised the recognition of a Grant, Eisenhower, Patton or Petraeus, but they can be guaranteed the promise of the great personal satisfaction always derived from contributing to the sustainment of the qualities, the capabilities and the reputation of the United States Army. It is an honorable pursuit. No other profession can promise more. □

***GEN Frederick J. Kroesen**, USA Ret., formerly served as Vice Chief of Staff of the U.S. Army and commander in chief of U.S. Army Europe. He is a senior fellow of AUSA's Institute of Land Warfare.*

Food for Thought for Battalion and Brigade Commanders: Developing Leaders in Garrison

By LTG James M. Dubik
U.S. Army retired

One of the negative by-products of the continuous rotations associated with a decade of war is reduced time that battalion and brigade commanders have had to develop their junior leaders. One of the negative by-products of modularization is reduced time general officers have with their subordinates. Fewer rotations and more dwell time offer the opportunity to offset these negative by-products and sustain junior leaders who use initiative at home station as they have on the battlefields of Iraq and Afghanistan. The question is: How? This article contains some of the most productive in-garrison tips for commanders that I've seen work for developing leaders and sustaining initiative.

Focus Energy and Attention

If a commander does everyone else's job, he or she is not properly focused. The "Big Four"—the commander, the command sergeant major (CSM), the executive officer (XO) and the operations officer (S3)—run brigades and battalions. The commander has to lead. Commanders can create time for leading by giving their command sergeant major responsibility for all individual training, their executive officer responsibility to run the staff, and their operations officer the job of managing all the systems associated with coordinating and supporting training.

Majors (and some lieutenant colonels at brigade/regimental level) run a unit's systems. The XO should be the person responsible for making sure the unit's personnel, physical security, communications, maintenance, supply and transportation systems are running as effectively and efficiently as possible. He or she should run your command inspection program—an important aspect of making sure your systems are serving soldiers as they should be and an essential ingredient in teaching junior leaders responsibility and accountability for "their slice of the Army." The S3 should make sure that all training is scheduled and supported properly.

U.S. Army/SSG Jason Epperson

With this kind of task differentiation in place, commanders can divest large portions of the management of their units to free up time to lead. Importantly, as a commander, you will want to keep abreast of problems, but you can do this by using your time circulating within your unit and talking to leaders and soldiers. Equally important, your field-grade officers will learn what it takes to run a brigade or a battalion, so they will be better prepared if they get a shot at command. Furthermore, your subordinate commanders will increasingly feel like the unit is commander-run, not staff-run.

Develop a Meeting Discipline

All commanders often feel like they just go from meeting to meeting, and sometimes that is the case and no one can avoid it. A commander can analyze recurring meetings, however, and take a disciplined approach to meeting management, thus creating a garrison battle rhythm.

For example, let your XO conduct internal staff meetings and maintenance review meetings with the XOs of your subordinate units and the appropriate members of the staff. The XO can provide you with a summary of key issues you can review in order to provide guidance to him or her—guidance that often takes less than one-quarter of the time that sitting in a meeting would have taken. Large, increasingly long commander and staff meetings are not really as necessary as some believe. If a weekly commander's meeting is necessary at all, you can bring subordinates together to discuss command actions associated with leading the unit. This kind of meeting discipline teaches XOs how they fit into a larger unit and subordinate commanders how to think at the next level.

Let your S3 conduct training-support meetings. (Some may want the XO to run these meetings; that's fine too. The point is that it should not be the commander.) The commander and CSM are the chief trainers. Both are responsible for ensuring that subordinate units are training on the right set of collective, individual and leader tasks and not putting too much on the training schedule. The chief trainers run training meetings with their subordinate commanders, CSMs or first sergeants. The chief trainers are responsible for making sure training is done to standard, not to time, and that training is repeated if necessary. Once you decide what training will be done, your S3 (or XO), with subordinate XOs and selected staff representatives, make sure the training is coordinated and properly supported.

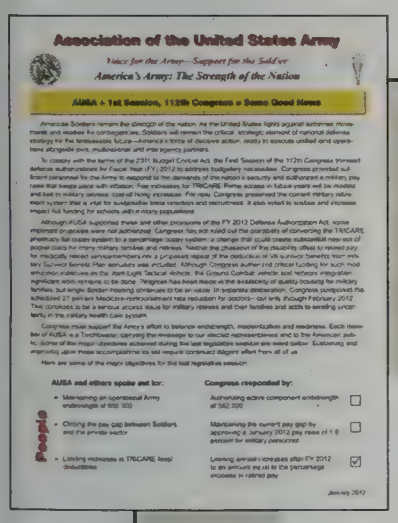
As for meetings at your "next higher," use the Big Four approach whenever possible. Naturally, every commander will attend those meetings that "the boss" specifies, but when not specified, send somebody else. When a commander uses one of the Big Four, however, you must empower that person to speak and make commitments on behalf of the command and not be second-guessed. Ninety-five percent of the time, your representative, if properly prepared and empowered, will make the right decision. Poor decisions are teaching opportunities to mitigate errors.

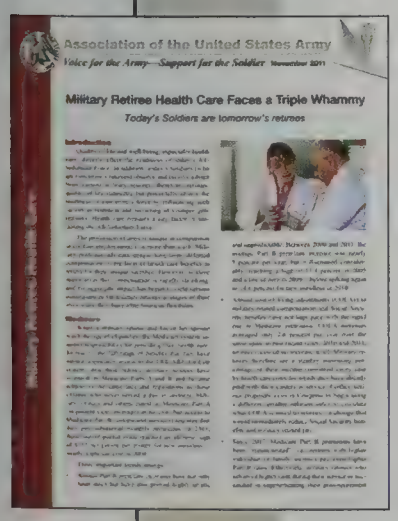
Meeting discipline, as well as using the Big Four effectively, develops a subordinate's ability to use his or her judgment, to think at higher levels than he or she is assigned and to learn how to be part of a larger unit team—all important developmental lessons.

Control Email

It is difficult, if not impossible, to control the email received from superiors, but you can control email within your command in ways that reinforce leader development and keep information flow, coordination and decisions at their proper levels.

Direct all routine staff updates and coordination emails to the XO but not to the commander. A commander should be able to operate with direct communication from the XO, S3, CSM and subordinate commanders. In addition, direct all routine information emails to stop at a specified time on weekdays


Association of the United States Army
Voice for the Army—Support for the Soldier
America's Army: The Strength of the Nation
AUSA • 1st Session, 112th Congress • Some Good News
People


Association of the United States Army
Voice for the Army—Support for the Soldier November 2011
Military Retiree Health Care Faces a Triple Whammy
Today's Soldiers are tomorrow's retirees

Help AUSA continue to be the Voice for America's Army

The Institute of Land Warfare (ILW), the educational arm of AUSA, publishes papers and Torchbearers that educate the Administration, Congress and the general public on issues directly affecting America's Army and our Soldiers.

The printing of these papers costs money and ILW, as a non-profit, must depend on contributions. Help ILW continue to ensure that America has the strongest Army possible and that our Soldiers are taken care of.

For more information, please contact Millie Hurlbut at 703-907-2679 or mhurlbut@ausa.org.

THE INSTITUTE OF LAND WARFARE • AUSA •

and for none to be transmitted on the weekend. Of course, the Big Four will have to enforce these directives by not responding during the blackout times and by politely reminding those who distribute routine information too widely. An email received from a superior during a blackout time is an opportunity to respond: "Yes, sir, I'll get that information to you first thing tomorrow or first thing on Monday." This takes some guts, but that is why leaders get the big bucks.

Next, whenever you get an update from one of the Big Four or a subordinate commander that falls into the "too much information" category, take action. Send a polite email back, thanking the sender for his or her leadership on the particular issue, acknowledging the importance of the issue, expressing confidence in that person, and saying no other update on that issue is needed unless certain stated conditions apply. With proper email discipline, staff and subordinates learn what they should keep within their own areas of responsibility and what the commander needs to know.

In turn, don't think that you must be told everything just in case your boss asks you a particular question. Such modus operandi creates information overload, demands too much of the staff and subordinates, results in an overcentralized command climate, locks leaders to email screens, creates busy work, reduces initiative and is designed for the off chance that you may be asked a particular question.

This email discipline approach starts from a foundation of trust and decentralization. It relies on the principle of: I don't know, but I'll find out.

Know When to Leave

The best commanders know when to leave—in at least two senses. If a subordinate asks a commander, "What should I do?" and it is clearly the subordinate's authority to decide the answer, your response should be something like: "Well, here are some factors you should consider and some people you should talk to. Let me know what you decide and how it turns out." Then leave. You cannot develop subordinates if you make decisions that are rightfully a subordinate's to make. Of course, there will be times when a direct answer is appropriate. Most of the time, however, these kinds of situations are opportunities to teach the junior leader how to approach problem solving and to take action.

When it comes time to take leave in the formal sense, put someone in charge during your absence, on orders if necessary. In the presence of other subordinates, the commander must tell the person left in charge—at battalion level, this can be alternated between the XO and the S3; at brigade level, it can be rotated among the battalion commanders—that no decision is to be left unmade. Instruct this person that all decisions are to be made fairly and after consultation with the right set of leaders within the unit and recorded, and that he or she should not contact you with routine updates but only in emergencies. When you return from leave, review the decisions with the subordinate, using the session as a teaching opportunity.

These two approaches take some guts, but in the end both are useful in developing subordinates who can think and act for themselves.

Knowing when and how to leave, focused task differentiation, a structured meeting management program and email discipline all help create a command climate in which subordinate leaders—staff and command—are expected to decide and act within their areas of responsibilities.

All commanders are teachers, and one of the most important teaching mediums in our profession is the commander's behavior. What a commander does and how he or she runs the unit count. As each of us grows up in the profession, we develop much of our leadership behavior based upon our experiences, good and bad. Although we read about great leaders and are taught what the Army expects leaders to be, know and do, in the end, the greatest lessons come from our experiences as subordinates. Every day commanders have opportunities to teach the next generation of leaders. I learned these four techniques by watching my bosses, and I was lucky to have some great teachers.

There is so much more that could be said about great techniques that work, but these will have to suffice for now. □

***LTG James M. Dubik**, USA Ret., is a former commander of Multi-National Security Transition Command-Iraq and a senior fellow of AUSA's Institute of Land Warfare.*

Answering the Question: An Army for What?

By Richard Hart Sinnreich

The U.S. Army has a problem. It's not a new problem. In fact, it's a problem that has recurred in the wake of nearly every war since the founding of the republic. It can be summed up in a simple question: An Army for what?

In principle, there's an equally simple answer: According to Title 10 of the U.S. Code, the Army "shall be organized, trained, and equipped primarily for prompt and sustained combat incident to operations on land."

But what style of combat? Against what kind of enemy? How promptly, and sustained for how long? And above all, pursuant to what kinds of operations? Title 10 answers none of these questions, and yet the answers to those questions are what govern, or should, what kind of army the nation organizes, trains and equips.

Instead, unlike its sister services, each of which has a definable and distinguishable focus—maritime power projection, aerospace supremacy, amphibious operations—America's oldest, largest and traditionally least glamorous military service always has been a sort of military multitool, asked to perform everything from disaster re-

The smart choice for reliable, adaptable weapon systems for medium and large caliber platforms.

Reliable
When needed in the heat of battle, Meggitt's linkless ammunition handling systems deliver rounds with every pull of the trigger. High reliability makes them ideal for use in unmanned applications.

Adaptable
Linkless ammunition handling systems from Meggitt have been successfully deployed on a variety of ground, sea and air platforms in both medium and large caliber — single shot, or fully automatic, with rounds being fed at rates up to 6,000 shots per minute.

email: greg.hill@meggitt.com
www.meggittdefense.com

MEGGiTT
smart engineering for
extreme environments

lief to nation building to high-intensity combat.

Precisely because those expectations always have been so broad, the Army almost never has been ideally configured to satisfy any. Perhaps the closest it has ever come to finding itself almost perfectly adapted to a task was in 1991 when, in conjunction with its sister services, the Army sliced through Saddam Hussein's presumably more experienced and battle-hardened ground forces like a hot knife through butter.

The result was one of the swiftest, most lopsided victories in the history of modern warfare. But the Army that contributed to it hadn't been designed for that mission. It had been designed instead to help defeat a Warsaw Pact invasion of Western Europe. In comparison, Desert Storm was the military equivalent of the New England Patriots or the New York Giants taking on a scrub team.

Similarly, in September 2001, when Osama bin Laden's minions flew airliners into the Pentagon and World Trade Center, the Army was neither equipped nor trained to conduct counterinsurgency and armed nation building. That it nevertheless has managed to cope with both challenges testifies to the adaptability of its soldiers and leaders, but not to deliberate design.

Now one of those commitments has ended and another has begun to wind down. Recently, Defense Secretary Leon E. Panetta announced that NATO's combat mission in Afghanistan will transition next year to advice and assistance to indigenous Afghan security forces. Meanwhile, the new defense guidance previously issued explicitly debars designing U.S. ground forces for "large and protracted stability operations."

Which once again introduces the question: An Army for what? That it will be a smaller Army, we already know. Current budget forecasts visualize a reduction in active Army strength over the next five to seven years from its post-9/11 peak of about 570,000 troops in 2010 to 490,000.

That's still larger than the pre-9/11 active Army. But what kind of Army will it be? Configured to do what? That's the question currently bedeviling senior Army leaders, and for which no answer thus far proposed seems to have convinced politicians and bureaucrats outside the Army who must man and equip it, and perhaps even more important, young leaders inside the Army who must organize, train and lead it.

As long-time commentator Sydney J. Freedberg Jr. wrote recently, "To defend itself in the future rounds of budget fights sure to come, and to motivate the soldiers it wants to reenlist, the Army needs a positive vision of what its mission ought to be in the post-Afghanistan era."

That vision certainly needs to reflect the reality that the Army must be versatile enough to perform a broad range of tasks in an equally wide range of circumstances. But it also needs a conceptual center—a capability around which all others are built, and against which all others must be measured and prioritized.

That central capability always has been and must remain the conduct of high-intensity combat against a peer or near-peer adversary. Whether that adversary represents a nation-state or a non-state actor ultimately is irrelevant. What critically matters to the Army's force design is the military challenge that it presents, not the reason for presenting it.

Of course, as even the brief history recounted here demonstrates, any such vision is very likely to be proved wrong in some measure the moment shooting starts. But, as British military historian Sir Michael Howard famously noted, that inevitable divergence doesn't matter, provided that the Army doesn't get its central capability "too badly wrong," and provided that it retains the intrinsic ability to adapt it quickly once the true need materializes.

Not "jack of all trades and master of none," but rather master of at least one key trade, even if jack of all the others. No other answer is militarily defensible. □

"I say to hell with *The Art of War*. I say we hack into their infrastructure."

***Richard Hart Sinnreich** writes regularly for* The Lawton *(Okla.)* Sunday Constitution. *This article originally appeared in the February 5, 2012,* Lawton Constitution *and is reprinted by permission of the author.*

America's Army
The Nation's Force of Decisive Action

U.S. Army/SSG Teddy Wade

Excerpts from an address to the AUSA Winter Symposium

By GEN Raymond T. Odierno
Chief of Staff of the Army

The position of strength that the Army has is that everyone has seen over the last 10 years what our Army has done and is capable of. Lots of people want to put the Army in a box. They want to say this is what the Army can do: They can do this little thing over here. I am here to tell them that the Army is probably the most flexible, adaptable organization across all the services and that we can respond and be capable anywhere any time to support any combatant commander. That is what this is about today. ...

As you all know, it is a busy time back in D.C., as we just issued the 2012 Army Posture Statement. It was just unveiled, and the Secretary [of the Army John M. McHugh] and I are in the middle of our hearings. We've done one so far; we were in front of the House Armed Services Committee last [month]. The Secretary and I have three more together in front of the Senate Armed Services Committee, the House Appropriations Committee on Defense and the Senate Appropriations Committee on Defense. Then I get to do an additional one with the Military Construction Committee, where I will continue to discuss the budget that has just been unveiled. I believe the hearings are a good thing. It is an opportunity to reflect first and remind people what this Army has done. And I will say, as I do this, I hear constantly the gratitude and appreciation from the members of Congress as well as the American people about the unwavering commitment and accomplishment that our Soldiers have made over the last 10 years. That includes our Department of the Army civilians, who have also sacrificed so much during these times. And frankly, as the Chief of Staff of the Army, I could not be more proud of them. It really is an honor to represent such a dignified and courageous core of heroes who continue to raise their right hand and always say, "I am selfless enough to put my country first." In my mind, and I continue to say this, they rightly embody what is best about our country.

For over 236 years, the Army has overcome many challenges, but it always continues to answer our nation's call. Today we face another challenge—a global financial crisis on top of an already uncertain and increasingly complex environment in which we operate. As all of you are aware, probably better than I, the United States confronts a very large deficit problem, and we also know that sustaining

the strength of our economy is a national security issue. So accordingly, as most of you know, back in August the Budget Control Act was passed, which requires a $487 billion reduction in DoD spending over the next 10 years. And that has been reflected in the latest plan that was submitted from fiscal years [FY] 2013–2017.

I want to make it clear to everyone that the development of this budget was difficult. Sometimes … as we talk about the fact that we are going to make this work—and yes we are okay, that is true, but it was difficult. I define it as we are on the razor's edge right now in terms of the Army budget as I look over the next five years. That razor's edge is about balancing end-strength, readiness and modernization. We have to continue to balance those. The choices that the Secretary and I have to make will always be in balancing those three so we can still maintain whatever the size of the Army that is left as the best-trained, best-equipped force in the world today. We will never walk away from that. I will say that before we did this budget, and you've probably heard us say it, Secretary McHugh and I participated in an intensive and inclusive strategy review with the senior DoD leadership. In my mind, what is lost on a lot of people is that when I go around, everyone asks if I am worried about Air-Sea Battle and if I am worried about this and that. Air-Sea Battle is a continued Sea Op. It is a way to do certain things. It is certainly not the new DoD strategy. The resulting strategic guidance that we articulate has several primary missions for the Joint Force that clearly require a strong, versatile, expeditionary Army to meet our nation's security needs. Among them are deterring and defeating aggression, conducting irregular warfare, supporting counterterrorism, defending the homeland, and providing support to civil authorities. Going forward, you all know that our immediate priority is to meet our current commitments in Afghanistan and elsewhere by ensuring a highly trained, well-equipped, well-manned force. Our conventional and special operations forces continue combat operations as part of Operation Enduring Freedom, while simultaneously developing the Afghan security forces.

And I will tell you I just spent yesterday up at Special Operations Command; we had the first Army Special Operations Command Talks. Why do we do this? Admiral McCraven and I have worked for several years together in the Middle East, and we realize how important it is to sustain a long-term relationship between conventional and special operations forces. They cannot operate without the support of the Army. And there are many missions that they know they must go forward with that will require support from the Army. It is important for us to understand that. Our formations continue to stand watch on the Korean Peninsula, the Balkans and the Middle East. We have led relief efforts for many natural disasters at home and abroad, domestically and internationally. Our Corps of Engineers is preserving and rebuilding infrastructure and critical services, and we continue to provide vital institutional and executive agent support across the globe that significantly enables the Joint Force. Let me say that one more time: We continue to provide vital institutional and executive agent support across the globe that significantly enables the Joint Force. That is an important statement. The other services, the interagencies are dependent on the Army to provide support to their actions.

As we transition, we will change how we organize, man, equip and train our force to be more responsive for the combatant commanders so we can better enable the Joint Force of 2020.

So as we look to the Army of 2020, as a part of Joint Force 2020, how do we want to shape it? … It is important to understand how proud I am and how well our young men and women today have performed. Their selflessness, resiliency, and dedication to mission are an inspiration to all of us. Today, we are an Army that is globally engaged in 150 countries on six of seven continents. We have over 95,000 Soldiers deployed in support of operations; another 96,000 Soldiers forward stationed. Our strategic posture is a testament to our flexibility and adaptability as well as our unmatched credibility as the best-trained, best-equipped and best-led land force in the world.

Moving forward, our Army's primary purpose is steadfast and resolute: to fight and win our nation's wars. But we all know that the Army must be able to do much more than that. Today we require an Army that is adaptive and innovative, flexible and agile, integrated and synchronized, lethal and discriminate. Even more critical in today's complex and uncertain environment, the Army is the decisive arm of the Joint Force in a broad range of missions. Historically the Army has been focused on a specific set of needs, but these needs and the means in which they are resourced have changed. So we must fundamentally change how we do business. As we keep adding rocks to our Soldiers' rucksacks, all of us leaders today, in this room, must remain cognizant over time. Everyone's load can get too heavy and cause permanent wear and tear. So it is a good idea to pause for introspection, which is exactly what our Army is doing now, although we remain in contact.

As we transition, we will change how we organize, man, equip and train our force to be more responsive for the combatant commanders so we can better enable the Joint Force of 2020. This requires us to review a number of areas and adapt them in order to remain the most capable, most lethal, most dominant land force in the world. I will discuss a few of these with you today, including force structure, alignment of forces and headquarters, force generation, and modernization. Many other initiatives are under way, such as force mix, accessions and retention, home station training, leader development, and force well-being. …

By the end of FY 2017, the Army will decrease its end

Ground surveillance radar that's fast and powerful with piercing accuracy.

Situational awareness is key to success. It takes sharp eyes to detect the slightest movements of threats, day or night, in environmentally diverse and challenging conditions. With the SR Hawk™ radar you will see all. Invented by SRC and manufactured by SRCTec, this state-of-the-art mobile ground surveillance radar:

- Provides detection of people to 10 km, vehicles to 30 km
- Is based on combat proven AN/PPS-5D
- Offers a light, compact and durable sensor package

It's good to know your adversaries.
It's even better to see them.

To find out more, visit **www.srcinc.com/SRHawk**

SR Hawk™

Redefining possible.

SRC

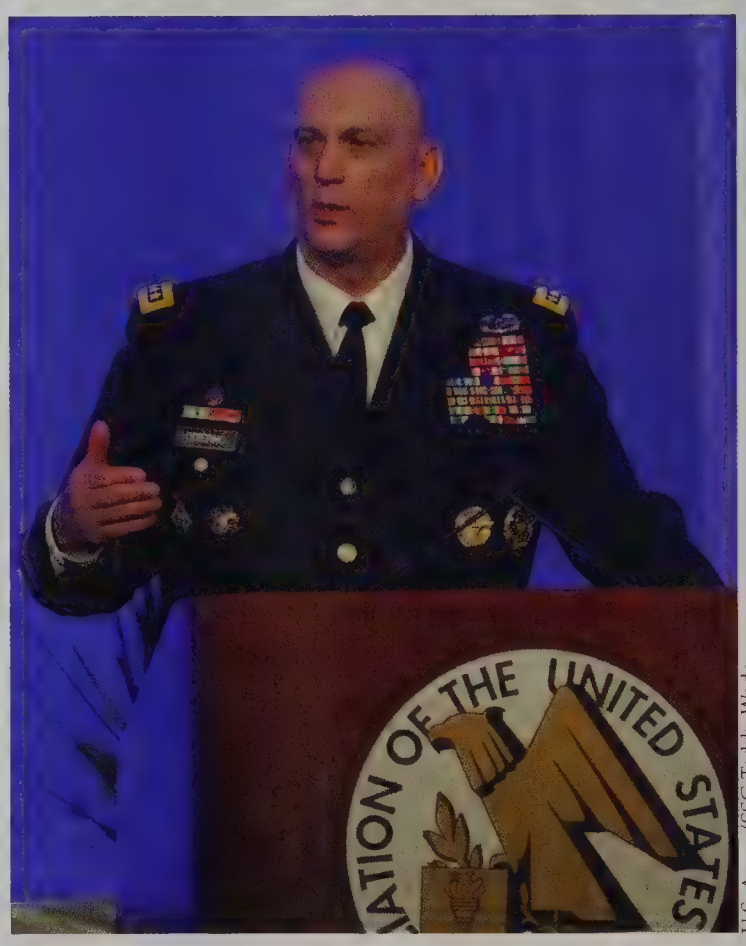
Defense › Environment › Intelligence

© 2012 SRC, Inc. All rights reserved.

strength from 570,000 to 490,000 in the Active Army; from 358,000 to 353,500 in the National Guard; and from 206,000 to 205,000 in the Army Reserve. Actually, the Army Reserve has already reduced [itself] to 205,000. But it is not just about the numbers themselves; it is about reducing our end-strength over a deliberate and gradual ramp through the end of FY 2017. Why do I want this? This allows me to ensure I can take care of our Soldiers and families and Department of the Army civilians. We can continue to meet our contingency commitments, to include Afghanistan. And we can remain responsive for unforeseen contingencies and facilitate reversibility if necessary in this uncertain environment. As recently announced, this decreased end-strength will result in at least eight fewer active component brigade combat teams [BCTs], going from 45 to 37. The first two BCT reductions occur in Europe, where the 170th BCT will inactivate in FY 2013, and the 172nd BCT will inactivate in FY 2014, both as they return from deployments in Afghanistan. Decisions on the remaining brigade combat team reductions have not yet been made.

As we draw down and apply the lessons from 10 years of sustained combat, and as we look forward to what characteristics and capabilities the force must be, I have asked TRADOC [Training and Doctrine Command] to lead an aggressive and extensive analysis of the brigade combat team design. Modularity has served our Army very well, and we will not walk away from it. However, we now have the time and the opportunity to study and recommend changes to our brigade combat team organization, and the execution and oversight of the modular brigades. It is critical that this vital warfighting formation remains dominant against the evolving hybrid threats in tomorrow's operational environments.

Using a combination of warfighter assessments, sufficiency analysis and combat modeling, TRADOC is informing critical decisions about force design in the future. This rigorous work included brigade commander seminars [and] study of future demands and risk and included more than 6,500 hours of simulated operations. We will continue this analysis over the next couple of months before making any recommendations to the Secretary of the Army on brigade restructuring. However, the early feedback clearly indicates that significant flexibility and capability would be gained by adding a third maneuver battalion and more engineers to our brigade combat teams. If a decision is made to add a third maneuver battalion and some more engineers, it would cause us to reduce further our brigade combat teams from a planned number of 37 down to perhaps 32 or 33 BCTs in the active component. However, such a reduction represents an investment in the overall number of battalions and combat formations while reducing overhead with brigade-level headquarters.



U.S. Army/SSG Teddy Wade

Again, there have not yet been any decisions made by the Secretary, but these are foreseeable possibilities based on lessons after a decade of war, with deliberate consideration to the characteristics and capabilities needed for Joint Force 2020 so that we can support the combatant commanders. In terms of our force structure, we will continue to grow Army special operations forces up to 35,000 of our end-strength. We have made incredible gains in the integration and synchronization between conventional and special operations forces over the past 10 years … . We intend to build on this relationship and institutionalize Army support to counterterrorism operations, counter-WMD [weapons of mass destruction] proliferation, and the wide array of tasks associated with building and improving partner capacity. This tremendous synergy affords the Joint Force and combatant commanders with significantly enhanced capabilities. Just as critically, we will also increase our aviation assets, not only to support the Army, but because they provide much needed support to the special operations force community, the Joint Force and, importantly, our international partners.

Following the end of our mission in Iraq, with the continued transition in Afghanistan, we now have an opportunity to reinforce our support to all the combatant commanders. You keep hearing me say that. We are an Army that is reaching out to make sure that we are an integral part of all of our combatant commanders, specifically geographical, but also to support the other combatant commanders as well. Looking at how we are going to regionally align forces and headquarters from corps level and below, we will work with them to develop a series of engagement tools that include a combination of assigned and rotational forces to conduct training and multilateral exercises, as well as develop partner capacity [and] provide planning capability for future contingency operations.

I see this as a model of how we will be doing things in the future, using a tailored approach that will help us create a more expeditionary Army, which will add flexibility and predictability for the COCOMs and with our sister services across the Joint Force. We will also leverage our prepositioned equipment sets for both contingencies and multilat-

INTELLIGENCE IN REAL-TIME TO THE FRONT LINE.

The U.S. Army's Enhanced Medium Altitude Reconnaissance and Surveillance System (EMARSS) will provide combat units in austere locations with direct, actionable, near real-time intelligence. Selected by the Army, the Boeing EMARSS solution brings together a new-generation platform and the most advanced, modular ISR systems to accommodate a broad range of missions—unmatched capability to help ensure ground units every possible advantage.

BOEING

eral training, which requires a comprehensive review of our Army prepositioned stock strategy. In addition, we are … looking [again] at our Army service component commands to better fit the unique requirements of their areas of responsibility to support planning and provide joint support. This includes establishing closer working relationships between Army service component commands, our corps, and division headquarters for contingency planning and theater security cooperation execution. Finally, there needs to be a greater Army representation in key positions at COCOM headquarters that can provide expertise on how Army capabilities can better support the Joint Force.

We will adapt how we conduct force generation through the Army force generation [ARFORGEN] process. We implemented the current Army force generation process several years ago in order to meet our requirements in Iraq and Afghanistan, to reduce our OPTEMPO [operating tempo], to measure OPTEMPO, to understand the impact it had on the force, and to ensure that those who are deploying were manned, equipped and trained appropriately. It should not come as a surprise that we are approaching another point of transition since we are no longer deploying forces to Iraq and continue to transition in Afghanistan. So we must adapt Army force generation to align with DoD strategic priorities and guidance. I envision a progressive readiness model for most units, but there are some high-demand, low-density units that may be better served by a constant readiness model. The majority of the units will progress though readiness levels. We will adjust the process where active and reserve component units advance through a reset phase, a training phase and an available phase, and prioritize their training and planning in support of a specific combatant command and mission sets.

In our active component, I want to align the future force generation model along command tours between 24 and 27 months long. Command would be rotated at the conclusion of the available period to coincide with the beginning of the reset period. Taking advantage of a more seasoned reserve component force, we will also adapt ARFORGEN to sustain an operational reserve. The recent combat experience of the Army National Guard and the Army Reserve in Iraq and Afghanistan has significantly increased their capabilities and readiness. The challenge is how to sustain reserve component proficiency, given the biggest constraint, which is time to train. This requires us to carefully manage notification, mobilization, and deployment timelines and work closely with reserve [component] leaders to leverage their unique skill sets and advantages for certain missions.

To prevent conflict, we must maintain credibility, which is partly based on modernization. In this regard, we must develop and field both a versatile and affordable mix of equipment that enables us to succeed in the full range of missions, while maintaining a decisive advantage over potential adversaries. We are better integrating our acquisition strategy with requirements process through capability portfolio reviews to ensure our modernization efforts are affordable, timely and achievable in line with technological development. In addition, we are looking to develop more efficient testing and evaluation strategies by eliminating redundancies. We want to develop incremental modernization capabilities that allow us to deliver new and improved capabilities by leveraging mature technologies, shortening developmental times, planning growth potential and acquiring the right quantities when needed. We seek to increase buying power by using this approaching combination with better business deals, better contracts and increased competition. The equipment requested in the President's FY 2013 budget strikes a balance between current and future needs; provides the basis for affordable equipping strategy over time; and takes into account strategy over time. It takes into account Army requirements and priorities. In developing this request, the Army made difficult decisions to shift funds previously programmed for future capabilities to current needs. With this year's budget, we did not lose any major programs, but many were slowed down. However, our modernization priorities were preserved and remain the network, the ground combat vehicle, the joint light tactical vehicle, our soldier systems and, of course, aviation.

For over 236 years, the Army has overcome many challenges, but it always continues to answer our nation's call. Today we face another challenge—a global financial crisis on top of an already uncertain and increasingly complex environment in which we operate.

To all of the attendees of this … symposium, thank you for your dedication and support to this Army. To General Sullivan and the great AUSA team, thank you for hosting this … first-class event. I have tried to cover a lot of ground … but I think it is important for us to have these discussions … . Of course, all of this depends on superior leadership. I believe that great leaders can lead change and solve any problem, and we are blessed with an abundance of them. We ask much more of our junior leaders today than we ever have. And I am absolutely committed to their development for the challenges in today's strategic environment, but most importantly, in the growing complexity of the environment they will face in the future. General McArthur in 1962 said, "Through all this welter of change, your mission remains fixed, determined, inviolable. It is to win our wars." Exactly 50 years later, his words could not be more true. America's Army is indeed in transition, yet we remain the nation's force of decisive action. The strength of our nation is our Army; the strength of our Army is our Soldiers; the strength of our Soldiers is our families; and that is what makes us Army Strong. ★

RK 4™ ER/T® 6.5-20x M5 AUTO-LOCKING ADJUSTMENT
G-RANGE SNIPER OPTIC

ITAR

RK 8™ CQBSS™ 1.1-8x
SIGNATED MARKSMAN AND BATTLE RIFLE OPTIC

ITAR

RK 4™ HAMR™ FIXED 4x – REFLEX RED DOT
RVICE RIFLE AND CARBINE OPTIC

DUAL-USE
HUNTING/SHOOTING TACTICAL

BUILT FOR BATTLE

THE US MILITARY'S NEXT-GENERATION LEUPOLD TACTICAL OPTICS ARE NOW IN SERVICE ON TODAY'S BATTLEFIELD. DESIGNED, ENGINEERED, MACHINED, ASSEMBLED, AND RELENTLESSLY TESTED IN OREGON, USA.

INSIST ON MARK 4™ AND MARK 8™ MOUNTING SYSTEMS FOR THE MOST DEMANDING APPLICATIONS.

LEUPOLD
TACTICAL OPTICS

AVAILABLE NOW @ 1-800-LEUPOLD #4

TACTICALOPTICS@LEUPOLD.COM | WWW.LEUPOLD.COM

~ PORTLAND, OREGON, U.S.A. ~

The FY 2013 Budget

Ups and Downs in Cutting

U.S. Army

AH-64D Apache helicopters

U.S. Navy/PO1 Mario A. Quiroga

UH-60 Black Hawk helicopter

By Dennis Steele
Senior Staff Writer

The greater shock of the fiscal year (FY) 2013 defense budget request largely was absorbed by the Pentagon's preemptive announcement of top-line dollar figures and reduction highlights, which closely followed and solidly aligned with President Obama's announcement of new national strategy priorities. When Department of Defense and individual service officials released their FY 2013 budget request, the shock had dissipated, but the sting remained as expanded details of reductions, rollbacks and rejiggered accounting were unveiled.

The overall FY 2013 DoD request is for $525.4 billion in discretionary budget authority to fund base defense programs and outlays and $88.5 billion in overseas contingency operations (OCO) funds to support ongoing operations, primarily in Afghanistan. In pure dollar amounts, this reflects a reduction from FY 2012 of more than $5 billion in the DoD base budget and $26.6 billion in the OCO budget.

Under the DoD request, the U.S. Army's FY 2013 request is $134.6 billion for a FY 2013 base budget and a $50 billion slice of the OCO request. Combining the base and OCO requests, the total is about $18 billion or 9 percent lower than the FY 2012 enacted budget, with savings mainly coming from the close of military operations in Iraq, although around $3 billion in Iraq OCO funding remains to fund Office of Security Cooperation expenses, including foreign military sales, along with residual costs to revamp equipment that was withdrawn.

The post-9/11 high point of Army funding came in FY 2008, when the base budget was $131 billion and the Army's portion of OCO funding was $121 billion, putting the FY 2013 total request, including base and OCO, at about 27 percent below the FY 2008 total.

The major ramification of the new defense strategy and the resulting five-year defense program (FYDP), the driver of budget estimates to FY 2017, is that Army unit strength will be reduced by at least eight brigade combat teams (BCTs), reducing active duty end strength from approximately 570,000 to 490,000, a reduction that includes the 27,000-soldier temporary wartime end strength increase that was scheduled to begin elimination under the FY 2012 budget. Further reduction of some 57,000 soldiers will be completed by the end of FY 2017. The Army's reserve components also will be reduced by about 5,000 slots during that time.

Several weeks after the budget request was announced, Army Chief of Staff GEN Raymond T. Odierno said the Army received permission from the administration to stretch the troop reduction process to six years instead of the five called for in the budget to address security concerns in the Middle East.

Although supporting and training Afghan security forces to take over from NATO forces is the key element in the planned U.S. drawdown in Afghanistan, the Army's OCO "pass through" funding for that purpose is down under the FY 2013 request. Approximately $5.75 billion is requested for Afghan security forces in the FY 2013 budget while $11.2 billion was allocated in FY 2012. Officials said the reduction

Back and Moving Forward

Raytheon

Patriot Missile system

U.S. Army/SGT Kim Browne

Stryker NBC

is because major equipment buys (such as vehicles, communications equipment and the like) generally have been completed.

The Army employed an unusual accounting method for active duty end strength in its overall FY 2013 request. Essentially, the 490,000 figure already is achieved in the FY 2013 base personnel account request. Only 490,000 troops are funded under the Army's base account, and the number above 490,000 is funded through the OCO account—reductions yet to be made. Meanwhile, another category of funding has been established for soldiers awaiting medical evaluation and possible separation (more than 12,000 soldiers in FY 2013), which uses its own funding account and establishes a system under which the number of soldiers in that category is not counted against overall end strength.

The eight-BCT reduction is couched as a starting point. More BCT cuts could happen, and many other shifts could occur. Officials previously announced that two BCTs from the overall eight-BCT reduction will be taken from U.S. Army Europe (the 170th and 172nd BCTs), leaving two permanent-station BCTs in Europe, supplemented by units conducting training rotations.

GEN Odierno later said that the active Army's BCT total could drop to 32, offset by adding another maneuver battalion to BCTs to increase their combat power.

Currently, the Army is conducting a comprehensive review of its whole force structure, and fairly large changes could occur throughout the Army. The force mix could be altered, and basing changes could be recommended. Within the FY 2013 budget request is a recommendation that Congress hold another base realignment and closure (BRAC) committee study in the wake of recommendations under the force structure study. If moves are legislated under the BRAC framework, additional funding to effect moves and closures would follow. Several senior members of Congress oppose another BRAC round. Until the force structure study is completed and potential closures announced, however, the Army has suspended some major construction plans in the FY 2013 request. As a result, the active Army's military construction request is for more than $1.9 billion, a drop from FY 2012's $3 billion level.

Army Aviation

Army combat aviation brigades (CABs) will not be cut under current plans, largely because of lessons learned during Operations Enduring Freedom and Iraqi Freedom. The U.S. military's freedom of movement requires helicopters, both for transportation and protective attack firepower, while other mission areas such as international humanitarian relief and assisting states during domestic emergencies rely on the availability of strong aviation assets.

The Army will complete the stand-up of its 12 CABs and continue establishing a 13th under current budget plans.

Under the FY 2013 budget request, the Army will buy or upgrade additional rotary-wing aircraft and unmanned aerial vehicles (UAVs). The total aircraft procurement request is for $6.3 billion including OCO budgeting.

Among the aircraft procurement requests:

- AH-64 Apache Longbow: The budget calls for buying 10 new AH-64D Block III aircraft and upgrading 40 more Apaches to Block III at a cost of $1.2 billion.
- CH-47 Chinook: The budget calls for 25 new Chi-

CH-47 Chinook

U.S. Air Force/MSgt. Daniel Farrell

nooks and 19 service-life-extension upgrades at a cost of about $1.4 billion.

■ UH-60/HH-60 Black Hawk: The budget calls for the purchase of 59 new Black Hawks at a cost of $1.3 billion.

■ UH-72 Lakota: The budget calls for the purchase of 34 additional Lakota light utility helicopters at a cost of more than $270 million. (The OCO budget provides $184 million for Kiowa Warrior helicopters to cover combat losses and maintenance.)

■ MQ-1 Gray Eagle: The budget calls for 19 new Gray Eagle UAVs at a cost of $518 million and $26 million for the RQ-11 Raven UAV.

Cut from the budget is the Army request for C-27J transport aircraft to replace C-23 Sherpa aircraft for short-haul tactical missions. The C-27J request was dropped by DoD in favor of conditionally putting some Air Force C-130 transports under Army operational control to fulfill the mission. Also cancelled is the Army's enhanced medium altitude reconnaissance and surveillance system program and the joint precision approach and landing system.

Also included in the Army's request is $647 million for Patriot missile advanced capability-3 procurement (missile and launchers) and $200 million for Patriot upgrades. The Army also requested approximately $400 million to procure more than 1,700 guided multiple launch rocket system missiles.

U.S. Army/SSG Jason Epperson

Vehicles

Many soldier system programs will continue to better arm and protect individual soldiers, but the mounted soldier system for combat vehicle crewmembers has been cancelled under the budget. The Army has requested to restructure and complete its family of medium tactical vehicle (FMTV) multi-year contract under the FY 2013 budget to save out-year costs with a final buy of more than 1,400 FMTVs at a cost of about $374 million. Another $55 million was requested to buy more than 1,500 family of heavy tactical vehicle systems. Also included in the FY 2013 request is more than $300 million to acquire 58 Stryker vehicles in the nuclear-biological-chemical detection variant, and more than $874 million to continue modifications and upgrades to the primary armored vehicle fleet, including Abrams tank and Paladin artillery system upgrades.

Funding to continue development of the ground combat vehicle (GCV) remains in the FY 2013 request ($640 million), but the overall GCV program will be stretched out and delayed to save money.

The Army will proceed (alongside the Marine Corps) with joint light tactical vehicle development to replace up-armored HUMVEEs and variants of the mine resistant ambush protected vehicle family with more than $117 million requested by the two services ($72 million, Army). The overall HUMVEE recapitalization (RECAP) program, however, is cut from the Army's base budget request, but RECAP continues at a reduced rate under the OCO budget to repair and upgrade HUMVEEs being withdrawn from combat theaters.

The FY 2013 OCO request includes $3.7 billion for reset—repair and upgrades—of equipment withdrawn from combat theaters.

Army Communications

The Army's priority development and acquisition programs (associated with communications, data integration and networking) are concentrated in the warfighter information network-tactical (WIN-T) program—$893 million requested. In addition, there is funding for associated systems: $556 million, joint tactical radio systems; $274 mil-

Navy Federal's low rates keep me moving.

Thanks, Navy Federal!
Take advantage of this incredible rate and test drive our new Auto Buying Program. It's sure to make your car-buying experience easier with great rates and super savings.

60-month loans on new autos as low as

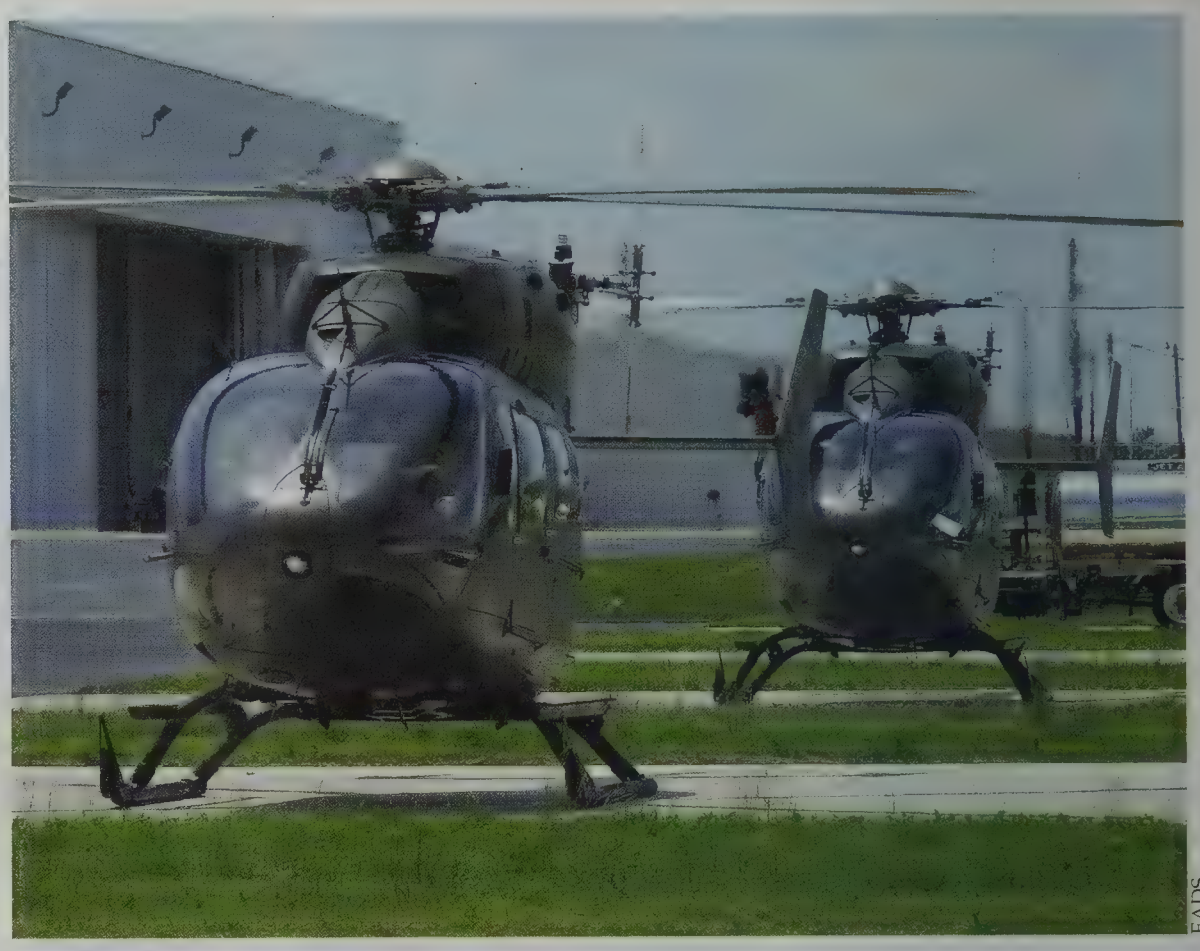
1.79% APR*

ARMY
MARINE CORPS
NAVY
AIR FORCE
DoD

NAVY FEDERAL® Credit Union
navyfederal.org
1.888.842.6328

Apply today at **navyfederal.org**.

Federally insured by NCUA. *Rates based on creditworthiness, so your rate may differ. Rates subject to term restrictions and may change at any time. The 1.79% APR is not eligible for any interest rate discounts. Rate available on 2011, 2012, and 2013 year models with 7,499 miles or less. Payment example: Loan amount of $20,000 for 60 months at a rate of 1.79% APR will result in a monthly payment of $349.00. © 2012 Navy Federal NFCU 11080 (2-12)


EADS

UH-72A Lakota

lion, distributed common ground system-Army; $141 million, joint battle command platform; $103 million, Nett Warrior program.

Army Personnel

The Army's request provides about $1.7 billion for soldier and family programs, including family and soldier resiliency programs, substance abuse treatment, suicide prevention programs, sexual harassment prevention programs and similar programs.

DoD reduced some overall personnel costs by reducing military pay raises in the coming years. Soldiers, however, are scheduled to receive a 1.7 percent base pay boost in FY 2013 along with a housing allowance increase of 3.9 percent and a 3.4 percent subsistence increase.

Civilian employees remain under a pay freeze, and reductions to the civilian work force will continue through hiring freezes and some actual cuts, but attrition and early retirement programs will be used in the reduction effort.

The military retirement system was not addressed directly in the budget; rather, DoD deferred to Congress, recommending that it establish a military retirement study commission to address the overall situation. DoD did recommend, however, that the current retirement system be grandfathered for current servicemembers and for those entering service before a date to be specified by Congress.

DoD also recommended changes to the military's TRICARE medical insurance program to address escalating medical costs. Recommendations centered on increasing individual contributions by retirees. DoD favors a scaled system in which higher earning retirees would contribute more. As proposed, military retirees earning more than $45,179 in annual retirement pay would pay (for TRICARE Prime) $820 in FY 2013; the fee would increase annually until FY 2017, when it reaches a maximum of $2,048. Smaller increases would be implemented for retirees who earn less than that retirement pay figure. Other measures to blunt military medical costs would continue, including inducements—in the form of higher out-of-pocket costs—to move participants toward cheaper ways of receiving prescriptions, such as mail order methods and switching to generic medicines.

The Army will invest more than $2.4 billion to research and development, testing, and evaluation, including more than $215 million for medical research.

General Atomics Aeronautical Systems Inc.

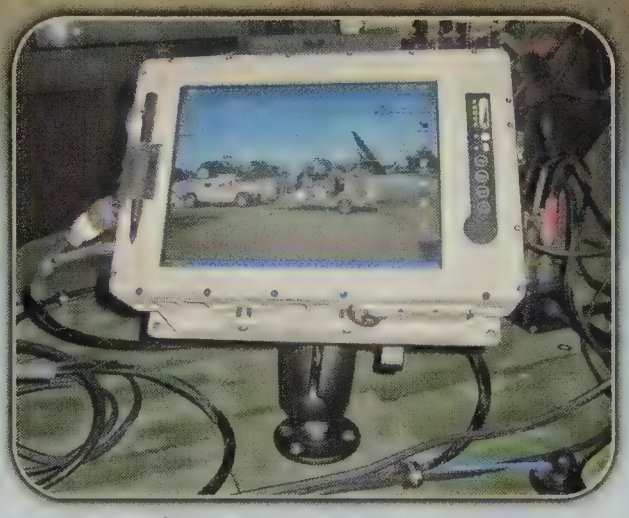
MQ-1 Gray Eagle

Behind the Bottom Line

Overall DoD reductions, in raw dollar terms, center on the current mandate to reduce the defense budget by some $487 billion over a 10-year period under the Budget Control Act. Secretary of Defense Leon E. Panetta said in congressional testimony that the FY 2013 request reflects a 20 percent reduction from FY 2010 (DoD's post-9/11 peak). The FY 2013 budget request and the overarching FYDP are planned on a scale to meet about half of the $487 billion objective by FY 2017.

Further—and deeper—automatic cuts, which would more than double the budget reduction requirement imposed on DoD, are currently required because of the so-called congressional super committee's inability to reach an agreement last year to trim $1.2 trillion from the federal budget. These are commonly called sequestered funds. The process, labeled sequestration, is rather like a doomsday device that Congress

RAM® MILITARY MOUNTS



Contractors who trust RAM®

NORTHROP GRUMMAN

Raytheon

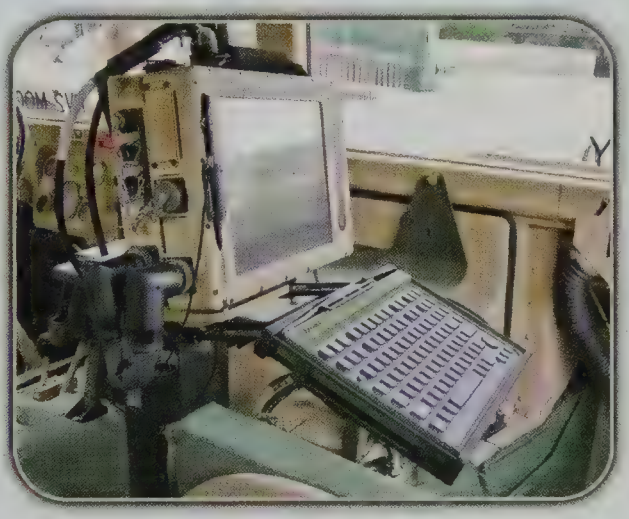
LOCKHEED MARTIN

GENERAL DYNAMICS

Rockwell Collins

TRW

DRS TECHNOLOGIES



THE RAM® MOUNT ADVANTAGE

- RAM® Shock Absorbing Mounts Protect Electronics for Improved Reliability
- Field Proven for Over 15 Years
- Made in the USA
- Lifetime Warranty

WWW.MILITARYMOUNT.COM

National Products, Inc. | Address: 8410 Dallas Ave. S., Seattle, WA 98108
Phone: (206) 763-8361 | Fax: (206) 763-9615
Website: www.ram-mount.com | Email: sales@ram-mount.com

enacted to make itself address federal spending, particularly as it contributes to the federal deficit. If no agreement is forged, the drastic act of sequestration would take effect. The threat failed to spur the super committee to effective action, however, and it is a wait-and-see situation whether the threat rebound to Congress as a whole will carry force. The sequestration doomsday clock still ticks.

Sequestration was not taken into account in the current FY 2013 budget request, FYDP or DoD's 10-year projection. In simple terms, it seems that DoD chooses to deal with such a crisis (to the tune of about an additional $600 billion cut in defense spending) if it must, when it must. Considered—perhaps hopeful—opinion is that implementation will shut down because at some point Congress will come out of orbit long enough to see the huge danger posed by sequestering, especially as it applies to national defense, and the overall rack and ruin it would cause. Obviously, the overall budget situation is politically charged. Defense cuts planned so far have been publicly couched in terms of an "opportunity" by defense officials—changes that would have been made necessary by the scaled culmination of operations in Iraq and Afghanistan and the changing global defense environment regardless of funding—thus the new strategy, the Obama administration's keystone defense plan called Sustaining U.S. Global Leadership: Priorities for 21st Century Defense. (See March ARMY Magazine, page 49.)

In a nutshell, the major dictates of the national strategy (again, the driving budget force, according to officials) are:

- Large, long-duration nation-building conventional ground force operations (as in Iraq and Afghanistan, for example) are seen as unlikely in the future, so conventional ground forces can be reduced. Instead, the United States will maintain an agile and flexible joint force with a long reach but a small footprint on the ground. Special operations forces (SOF) are the choice in direct-action operations and for many foreign military training missions, so SOF funding will grow.
- Technology will keep the U.S. military at the forefront and counter technological threats that potential adversaries are advancing.
- Cyberspace is increasingly a global battle zone, and defensive and offensive bastions must be staffed. Meanwhile, the watch of physical space over land and water requires more and new technologies to advance intelligence, surveillance and reconnaissance.
- While major threats remain in the Middle East and Southwest Asia (for which we will be watchful and prepared), increased American strategic vigilance in littoral Pacific areas is required to counter long-term threats, and while the U.S. commitment to NATO remains total, that totality will be manifested differently and less expensively.

U.S. Army/LTC Daniel Bohmer

From the national strategy is derived the defense budget, and to recount a few of the major derived consequences:

- DoD will cut Army and Marine Corps ground forces. (Smaller percentages of the Air Force and Navy personnel will also be cut because, overall, military personnel are expensive in all respects.)
- The pursuit (albeit more slowly) of a next-generation fighter bomber will continue, and remotely piloted aircraft advancement will be a priority.
- The current U.S. aircraft carrier group and air wing power-projection capability will be retained.
- DoD and the services will pursue "efficiencies" to stretch funding, shift funds to priority areas or eliminate future request requirements.

Concrete cost reductions were made in the FY 2013 request, but much of the overall savings are really phantom savings. They are not specifically reductions or savings in the general sense; they are an avoidance of previously programmed future request increases.

Increases not asked for are counted as savings in the rather strange but traditional Washington tally system. To the amount that DoD does not increase its budget under previous projections, it is, in effect, counted as a savings. The method is less strange and more substantial considering that funding increases would count against future deficits and that a major congressional budgetary concern is the federal deficit.

DoD achieves another degree of phantom savings because accounting and projections were made using "constant dollars"— current 2012 or, at the most, 2013 dollars—unadjusted for normal inflation consequences and other inevitable cost growth.

The result is an FYDP and yearly budgets, including FY 2013, that ignore inflation externally and pay for it internally. Meanwhile, the payment to protect ongoing technology development and advanced technology procurement also is largely paid for by DoD eating away at itself internally.

The result is that the DoD budget essentially flatlines for five years and sacrifices some of its extremities to save the core. ★

LIGHT ON WEIGHT.
HEAVY ON PROTECTION.

The Lockheed Martin Joint Light Tactical Vehicle is production-ready and blast-proven. Our vehicles have been through a rigorous boot camp of mountainous and desert terrain. They've driven over 160,000 combined miles. And while JLTV is heavy on force protection, Army and Marine helicopter lift tests also show it is light and transportable. Its dual performance for both the Army and the Marines makes it the most affordable choice for any mission. Equipped with Lockheed Martin's systems integration experience and BAE Systems' innovative protection, we're making sure JLTV is secure, reliable and ready to go.

THE LOCKHEED MARTIN TEAM

LOCKHEED MARTIN BAE SYSTEMS

JLTV

www.lockheedmartin.com/jltv

My Longest Day

Prelude

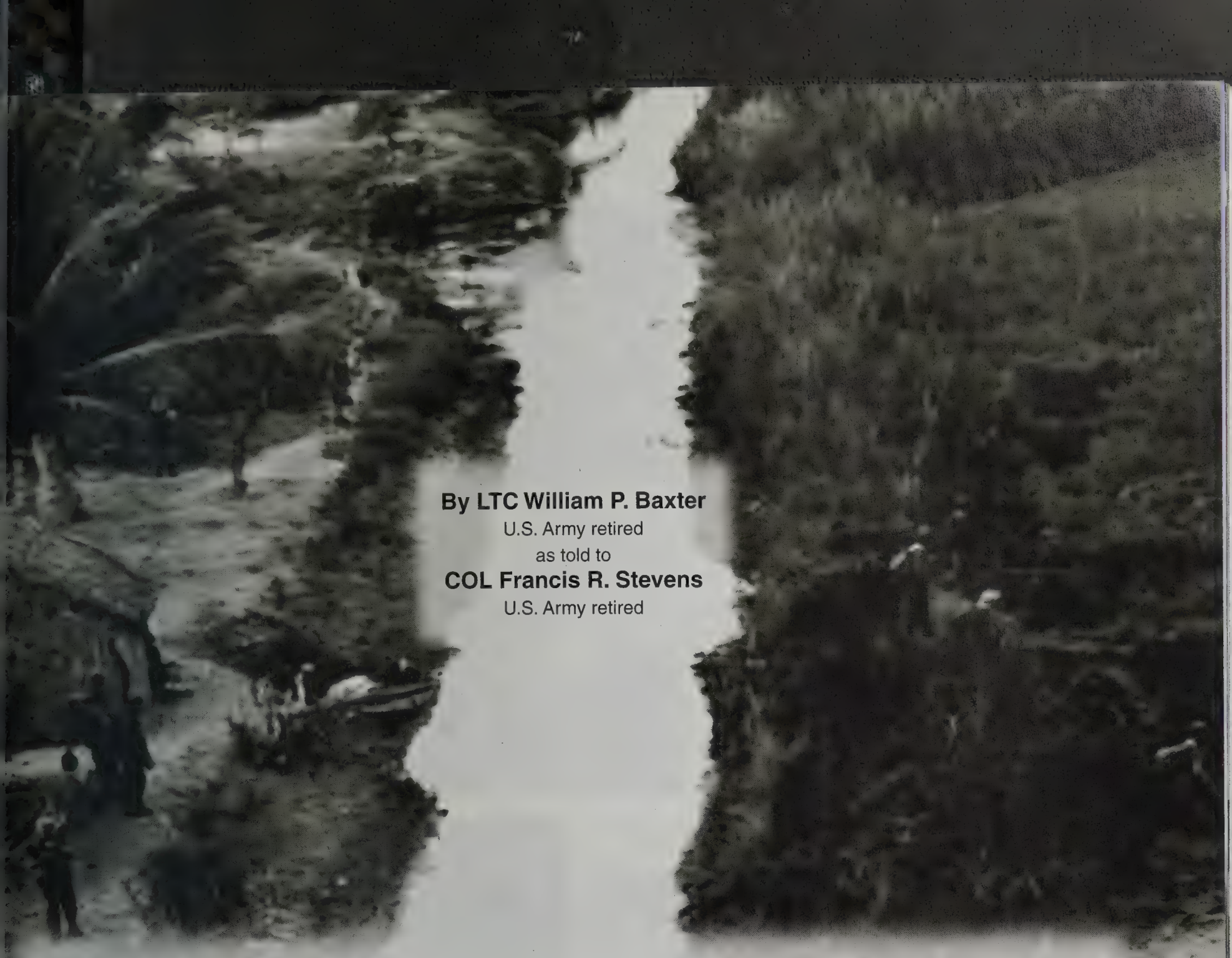
My "longest day" began at 0600, November 27, 1965. It was my first full day in the field in Vietnam, and I had never been in combat.

On the previous afternoon, I completed in-processing in Saigon and boarded a helicopter in Tan Son Nhut for a short flight to Tay Ninh and my assignment as senior advisor to the 3rd Battalion, 7th Regiment, 5th Infantry Division, Army of the Republic of Vietnam (ARVN). I was dressed in new jungle fatigues and boots and armed with an M2 carbine. Four magazines of ammunition, a bayonet and entrenching tool, two fragmentation grenades, and two smoke grenades hung from my harness. Two water bottles, a first aid pouch and a steel helmet completed my dress. I was ready!

A sergeant from the regimental advisory team met me at the airport, and we drove to the regimental command post (CP). The regiment was deployed in a perimeter defense with the 1st, 2nd and 4th battalions in the Michelin Rubber Plantation east of Tay Ninh. The CP was a lean-to and a few foxholes in the middle of the perimeter.

I could not help noticing the contrast between my spiffy uniform and the faded and tattered dress of the Vietnamese soldiers and their U.S. advisors. I received a blunt greeting from the regimental senior advisor. His first words were: "I do not carry a weapon nor wear a steel helmet because they are superfluous." His second sentence was: "This is a dirty little war between dirty little people in a dirty little country; it isn't a real military action." And there stood I, under arms and wearing a steel pot. Perhaps I was not as ready as I had thought.

After that curt introduction, he introduced me to the other battalion senior advisors and the Vietnamese regimental commander, who briefly outlined tomorrow's action. The regiment would move out at first light to exploit a B-52 strike about 10 kilometers north of our present posi-



By LTC William P. Baxter
U.S. Army retired
as told to
COL Francis R. Stevens
U.S. Army retired

tion, with my battalion, the 3rd, leading about two kilometers northwest of the rest of the regiment. I thought that separating my battalion from the rest of the regiment was a curious deployment, but I was too new to question the commander or the senior advisor.

The regimental commander called a Vietnamese lieutenant from the 3rd Battalion, who saddled up his platoon. After quick goodbyes to the regimental team and regimental staff, we started toward the 3rd Battalion position in a platoon diamond formation. I had no inkling that this was the last time that I would see any of them alive.

The troops were alert and serious. Along the way, the Vietnamese Air Force (VNAF) conducted an air strike on a target about 500 meters to our left flank. The platoon leader told me it was a village with "many VC [Vietcong]," but I saw only frightened civilians fleeing toward Tay Ninh. Two terrified people were carrying a wounded baby using a door as a stretcher.

I met the battalion commander and his staff at dinner. It was my first Vietnamese military meal: a bowl of rice with some unidentified vegetables, served out of a community pot. It was also my first real experience with chopsticks.

After dinner, the battalion commander and I walked the position. The 350 men of the 3rd Battalion were entrenched in a perimeter about 100 meters in diameter, with security outposts about 100 meters forward of the main position. As we walked, he explained that the next day's plan was to break camp at first light and move out at 0630.

It was near dark as I met with my advisory team, a first lieutenant deputy, a weapons sergeant, a supply sergeant and a radio-telephone operator (RTO). The rule was that any movement at night would draw fire, so we finished digging our foxholes, hung our hammocks and turned in for the evening. Our hammocks were slung over foxholes; boots and weapons were laid beside them. The idea was that if any shots were fired at night, one had only to flip over to fall into his foxhole and grab his weapon.

U.S. Army/PFC Henry V. St. Jean II

The Longest Day

The battalion turned out the next morning at 0530. Troops packed their gear and filled foxholes, and the security outposts returned. Just as we began to form for the march, we started receiving hostile automatic weapons fire from the south. I radioed the regimental advisor to report our situation. I informed him that this was not a major attack; it was more like a holding attack. He responded with a curt "Roger, out." I looked at my watch, and it was exactly 0600. The battalion redeployed to engage the enemy. I saw tracers lacing among the rubber trees—my first taste of hostile fire. I took my RTO and weapons sergeant and crawled toward the battalion CP, about 20 meters away. I left the rest of the team with orders to finish closing our position and then to join us at the CP. We heard the roar of a major battle coming from the direction of the rest of the regiment. The regimental advisor tersely announced on the radio, "We are escaping and evading." After that, we lost all contact with him and the rest of the regiment. It was my last contact with them.

U.S. Army/SP4 Richard Dixon

A Vietnamese soldier reported that two of my team were wounded. The rest of the team and I crawled under fire to where they lay, writhing on the ground and crying in pain. I could see completely through a bullet hole in the weap-ons sergeant's shin. My deputy had been shot in his right armpit, and the bullet had exited from his back near his spine. His wounds bubbled as he breathed, making the sickening sounds of sucking chest wounds.

I told the wounded, "Shut up and shoot back!" and directed the other team members to return fire. The RTO was attempting to contact anyone on the division advisor's net, while I bandaged the wounded. (I did an outstandingly poor job of it, but it was impossible to do better while lying prone under small-arms fire.)

U.S. Army

***LTC William P. Baxter**, USA Ret., graduated from the U.S. Military Academy in 1956. Commissioned in the Infantry, he served two tours in Vietnam, being awarded decorations for valor on both. On his first tour, he was awarded the Distinguished Service Cross for the action described in this article and was also awarded three Bronze Star Medals, a Vietnamese Cross of Valor and a Legion of Merit. He is the author of a series of articles published in ARMY about Soviet tactics and weapons in the 1980s and is the author of the book* Soviet Airland Battle Tactics. *He was assigned to the U.S. Military Liaison Mission to the Group of Soviet Forces in Germany. LTC Baxter told his story to **COL Francis R. Stevens**, USA Ret., who graduated from the U.S. Military Academy in 1957. While at the Academy, he was assigned to the same cadet company as William Baxter. Commissioned in the Artillery, COL Stevens served one tour in Vietnam.*

ITT EXELIS

THE POWER OF INGENUITY

Broadband on-the-move that works anywhere. Especially the middle of nowhere.

When the mission takes you far from civilization, look to GNOMAD for a modular connectivity solution. A global Ku-band satellite system, GNOMAD extends mobile networks beyond line of sight. Combat forces can rely on proven broadband to supply secure voice and data communications, regardless of location. Easily expandable, GNOMAD provides a flexible option. To configure this cost-effective networking solution, visit **www.exelisinc.com/gnomad-dom**.

www.exelisinc.com

Exelis and "The Power of Ingenuity" are trademarks of Exelis Inc.
ITT is a trademark of ITT Manufacturing Enterprises, LLC, and is used under license.
Copyright © 2012 ITT Exelis. All rights reserved.

Photo courtesy of Tech. Sgt. Efren Lopez

U.S. Army/SP4 Dennis Kurpius

The firing rapidly intensified. We saw dull red muzzle flashes about 50 meters away, and tracers thudded into a rubber tree just above our heads. Volleys of fire from 75 mm recoilless rifles whooshed between the rows of rubber trees and crashed into our position, showering us with hot metal fragments. The holding attack had escalated into a major assault.

I realized we were all going to be killed if we did not get to a more covered position, so we crawled to a stream 30 meters away, dragging our wounded with us. The RTO got shot in the arm, so I took the radio.

We flopped into the stream. The bed was about 8 feet deep: Light, tan-colored, muddy water, streaked with reddish mahogany-brown blood, was up to my chest. It was choked with dead and dying soldiers, and I could see water geysers from enemy fire splashing toward us. We saw enemy soldiers wearing black pajamas and pith helmets moving along the stream and firing into groups of our soldiers in the water. I grabbed a panicked soldier carrying a machine gun and situated him on the stream bank to fire at the enemy. He grinned as he fired but suddenly turned toward me, half his face gone, and fell into the stream.

The noise of the battle was so loud that it was impossible to talk. Tracers flew everywhere, and the air smelled of burnt cordite mixed with the stench of raw blood and torn flesh. I was reminded of the smell of dressing wild deer or geese in hunting season.

The stream had become a death trap. I found a drainage ditch, 18 inches deep, feeding into the stream. I lifted the lieutenant into the ditch and then the sergeant, but he shuddered, slipped out of my arms and disappeared underwater. His blood spattered my glasses. I pulled his head above water and stared into the whites of his eyes. I screamed into his ear, "Stand up, damn you!" Much to my amazement, he blinked his eyes, focused on me and stood on his own feet. He had a new wound in his neck. I got him and the rest of my team into the ditch and told them to crawl as far from the stream as they could.

I radioed for fire support. A spotter plane that had been deployed to support me asked that I mark my position with a smoke grenade. I started to pull a purple smoke grenade from my harness, but bullets were splashing around me and I had to get into the drainage ditch fast.

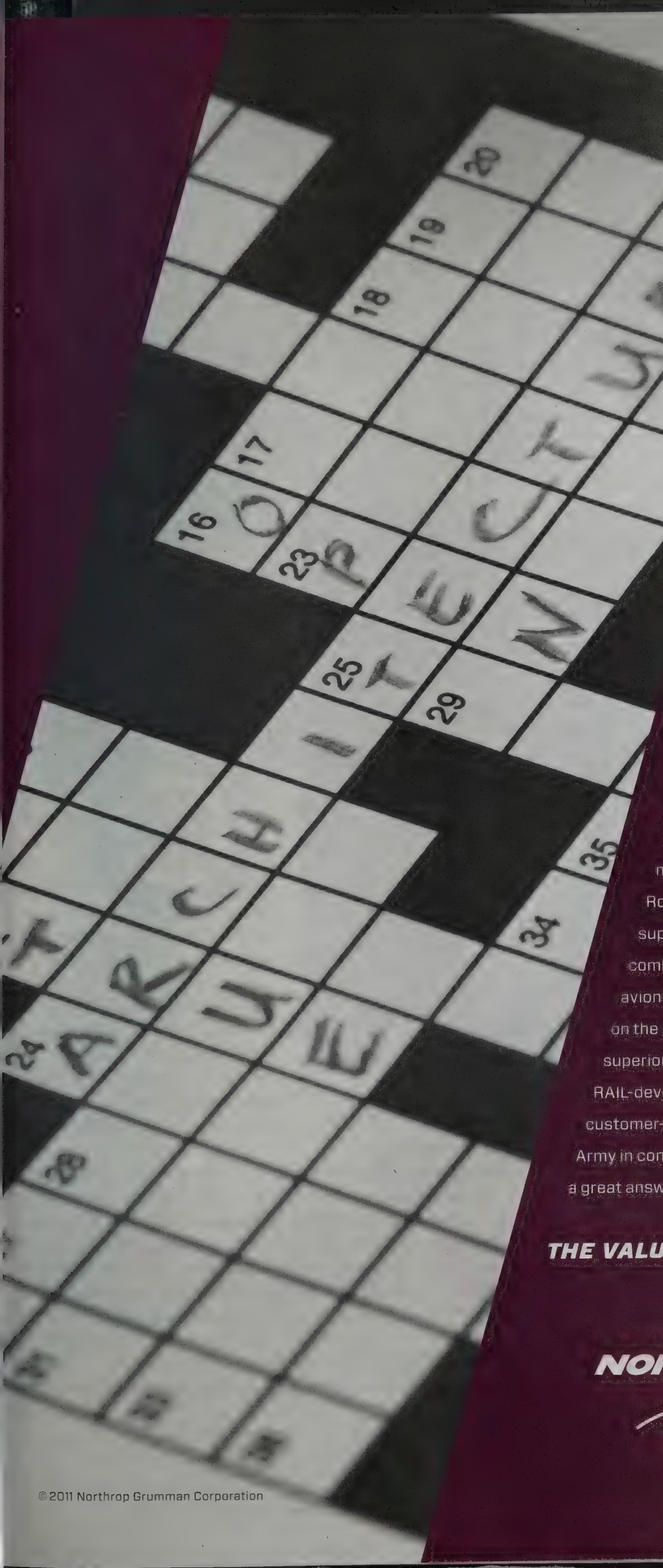
I crawled to my team, about 20 yards away, over bodies of dead and dying Vietnamese soldiers. One pointed to the area of his buttocks, which had been shot away, exposing his intestines. His eyes were already glazing over with impending death, and I could not help him.

We engaged in our own firefight with the enemy in the streambed. I was lying on my back shooting between my legs, while team members fired to my left and right, as enemy soldiers popped up and fired at us, then ducked back down.

Aircraft thundered overhead, and the spotter said he saw my purple smoke. I had not thrown the grenade, but I apparently lost it while climbing into the ditch. I guess that enemy soldiers in the stream threw it, hoping they would not be bombed.

I told the spotter to strike the smoke. He replied that it was too close to us for a 500-pound bomb. I responded that the enemy was closer than the smoke, so my choice was the bomb. Moments later the bomb burst, and the noise and shock of the explosion were paralyzing. The spotter asked, "You OK?" I mumbled, "I think so."

As I peered around the base of a rubber tree to assess the situation, enemy automatic weapons fire shot the long antenna off of my radio. Pieces of it rained down on us. I replaced the stump with the short whip antenna and laid it on the ground. The whip antenna would transmit only a short distance, and my only contact was with the spotter overhead until an advisor with an ARVN artillery battalion, which had deployed close enough to support us, called in with the offer of much-needed fire support.



THE VALUE OF SOLVING COST AND CAPABILITY QUESTIONS.

Meeting the U.S. Army's needs for future integrated-cockpit capability is critical to mission success. The Northrop Grumman Rotorcraft Avionics Innovation Lab (RAIL) supports the rapid and agile development of combat-proven advanced cockpits with integrated avionics architectures. The RAIL test bed is built on the principle of truly open architecture to deliver superior combat effectiveness and cost efficiency. RAIL-developed cockpits are scalable, receptive to customer-defined apps, and interoperable — putting the Army in control of the future. Northrop Grumman RAIL: a great answer to multiple questions.

THE VALUE OF PERFORMANCE.

NORTHROP GRUMMAN

www.northropgrumman.com/rail

© 2011 Northrop Grumman Corporation

My team shot at enemy troops in the trees only 30 meters away. I know that I shot at least two. Hostile fire intensified, and 82 mm mortar shells exploded around our position. I had to admire the skill of the enemy mortar crew as it systematically marched mortar fire in a rectangular pattern through our position. Volleys from 75 mm recoilless rifles firing down the rows of trees exploded around us. The thump and crack of fire from AK-47s added to the cacophony. Dull red muzzle flashes rippled among the trees. I directed air strikes and artillery fire on the nearest enemy.

The noise of the battle was overwhelming. Adrenaline sharpened my senses. I was sensitive to the smells of cordite, high explosives, blood and flesh all at once. My vision was sharpened, colors were brighter than normal, and it seemed that I could see everything all at once. I forced myself to ignore all but the most immediate events relevant to survival to avoid being paralyzed by sensory overload.

My weapons sergeant was rolling back and forth from left to right. Each time, he took aim with his carbine but never fired, before rolling back in the other direction. He had "buck fever" because he had too many targets to shoot at. I beat on his back and yelled into his ear to shoot only in one direction, and he was OK after that.

I saw an enemy soldier crawling towards me up the ditch with his AK-47 cradled in his arms. He wasn't looking where he was going and was up to my feet before I could get my carbine untangled from the radio. He looked at my boots just as I fired a burst into his face.

U.S. Army/SP4 Dennis Kurpius

An aircraft dropped a "daisy cutter" bomb directly in front of us. The ground shock wave bounced me out of the ditch; the air shock wave slammed me down again. My ears rang from the noise.

We heard bugle calls, and hostile small-arms fire exploded in intensity. The enemy started his final assault. I called all available fires on our position, only to be told that none would be available for 30 minutes. I responded that we all would be dead by then.

My team was looking at me with wide eyes, waiting for orders. I told them to fix bayonets. My plan was to rush into the enemy assault line as it closed on our position with the faint hope that some of us might break through into their rear before being killed.

The enemy skirmish line swarmed over the ditch, but artillery fire had disorganized it, and it went around us to our left and right. We fired at them on all sides and to our rear. An enemy soldier, his AK-47 slung across his chest, suddenly appeared on the parapet of the drainage ditch. He stood, gawking at us with an expression of total surprise on his face, which changed to recognition and then resignation as he saw the muzzle of my carbine swing up at him. He was wearing gold-rimmed spectacles and a little gold cross on a chain around his neck. After one burst from my weapon, he fell backward with his Ho Chi Minh sandals in my face.

Once again, enemy bugles sounded, signaling a second assault. We all were about to be killed when an aircraft flew over, dropping hundreds of cluster bomb units (CBUs) containing grapefruit-sized bomblets that exploded on contact with the trees or ground, showering the area with marble-sized projectiles. This broke the enemy assault and left the battlefield in an eerie silence for a few moments. The sound of battle then resumed, but at a lower intensity. Another aircraft repeated the CBU drop. (I never could find out where those aircraft came from.)

The battle gradually faded away. I heard birds chirping and moans and soft crying of the wounded. I cautiously stood to survey the scene. The landscape was littered with broken rubber trees and twisted, broken, and bleeding dead as well as wounded ARVN and NVA soldiers, some writhing in pain. The air had an odor of raw flesh and acrid smoke. I looked at my watch. It was 1400: exactly eight hours since the battle had begun.

I was astounded to still be alive, and even more astounded to be uninjured. I could not understand how my team had survived the day. I was physically unscathed, but it would take years before I would understand how this day had impacted me in other ways.

I rounded up the remaining 45 effective troops of the 3rd Battalion, organized them into a platoon and deployed it in a diamond formation. We moved south toward Tay Ninh, carrying some of the wounded, and secured a clearing one-half kilometer away for evacuation of casualties. A helicopter landed, and we loaded my wounded team members on board. I was such a mess that the crew chief thought I was wounded too and tried to pull me on board, but I refused. We moved some of the most seriously wounded Vietnamese to the clearing and evacuated them before dark.

My uniform was in tatters, soaked in blood and reeking of gore. I was a veteran.

PFC Matthew Zajac, US Army, 2nd Infantry Division, Fort Carson, Colorado and his father, Mike, photographed at a Fisher House in San Antonio, Texas.

Fisher House Foundation's Hero Miles program provides military members and their loved ones free round-trip airline tickets, sending them to the bedside of their injured service member recovering at a military or VA medical center. Flights are made possible through frequent flyer mile donations by individual airline passengers.

Since its inception in 2004, the generosity of the public has allowed Hero Miles to distribute more than 25,000 airline tickets, saving our heroes and their families more than $40 million. Help reunite America's heroes with their loved ones by donating your miles today. Your contribution will make you a hero to those in need.

For more information, visit **www.fisherhouse.org** and click on *Hero Miles*.

HERO MILES

The Hero Miles program is grateful to our generous partners, including:
AirTran Airways ★ Alaska Airlines ★ American Airlines ★ Continental Airlines
Delta Air Lines ★ Frontier/Midwest Airlines ★ United Airlines ★ US Airways

Hero Miles is a program of the nonprofit Fisher House Foundation.
More information on the Foundation can be found at www.fisherhouse.org.

©2011 Fisher House Foundation / Brendan Mattingly Photography / Don Schaaf & Friends, Inc.

The Day After

The supply sergeant and I stayed in the Michelin with the battered remainder of the regiment. We occupied a perimeter-defensive position with the remains of the 2nd and 3rd Battalions. The subsequent three days were spent policing the battlefield. Our soldiers picked up the dead of both sides and loaded them into 5-ton dump trucks commandeered from the Michelin Plantation. This was grim and dirty work. By the end of the second day, the stench of decaying flesh was becoming unbearable.

I was told later that all the wounded members of my team had been medically evacuated to the United States. I had known them less than 24 hours.

I was ordered to determine the status of the missing advisors. They all were dead. The bodies of the regimental senior advisor and his radio operator were about a mile from the site of the regimental headquarters. Apparently the regimental advisor's legs had been wounded. He had been gaffed with a bailing hook through his jaw and dragged along the ground until his captors tired of dragging him and shot him to death. His RTO was found nearby. He had been bound, stripped and shot to death.

The bodies of the 1st and 2nd Battalion advisors were mixed with the Vietnamese dead where they were killed. The 4th Battalion had been sliced in half; the half that had been overrun were all dead. Most of the rest were wounded.

Postscript

I had written my wife, Janet, from Saigon telling her of my assignment just prior to the helicopter ride to Tay Ninh. She received the letter two days later—just in time to read a headline article in the Baltimore Sun titled 'The Death of a Regiment.' The first paragraph read, "The ARVN 7th Regiment died today in the Michelin Rubber Plantation north of Tay Ninh in Vietnam. All of the U.S. advisors also were killed."

Of course, this news shattered her, and she lived dreading the arrival of Army survivor assistance officers at her door. Unfortunately, I was out in the jungle and had no way to contact her. A reporter and cameraman from NBC interviewed me, however, and the interview was broadcast on the 7:00 P.M. news a few days later. Janet happened to be watching and was so excited to discover that I survived the battle that she did not hear the interview.

What had happened in the Michelin Rubber Plantation that day? The 1st and 2nd Battalions and the headquarters of the 7th ARVN Regiment were destroyed, and all of the U.S. advisors were killed. Two of the three companies of the 4th Battalion were annihilated, and all U.S. advisors were wounded. They composed the regiment's main battle position. My battalion was reduced to 45 effective troops; the rest were killed or wounded. All of my advisors survived, although three of them were wounded. There were about 200 enemy dead.

Apparently, the ARVN commander had had some inkling of a possible hostile attack on his regiment and had deployed my battalion to be bait for the enemy so that his main force could then attack them from the rear. The enemy instead attacked his main force, destroyed it and then turned its attention to the bait.

I later learned that the hostile force was a reinforced North Vietnamese regiment that had freshly arrived in South Vietnam through Cambodia only days before the battle. It was well-armed and equipped with the newest Soviet squad machine guns and AK-47 assault rifles, 82 mm mortars and 75 mm recoilless rifles.

The ARVN 7th Regiment was trained and equipped to fight only poorly armed irregular forces, being armed with U.S. surplus weapons from World War II. It was not trained or equipped to fight regular forces. Our largest weapons were 60 mm mortars. When I pointed this out a few days later to a visiting colonel from MACV (Military Assistance Command, Vietnam) Headquarters, sent to find out what had happened, he informed me that "our weapons were good enough to defeat the Japanese on Guadalcanal in 1942 and certainly were good enough for this war." On a large scale, this battle marked the transition of the Vietnam War from a low-intensity conflict between small units to a more intense war on a greater scale. It was the day that introduced me to hell. My regimental senior advisor found it was a real war after all.

Several weeks later I had reason to visit the G-2 office for U.S. Army Vietnam and was talking with an acquaintance who remarked, "Gee, that's too bad. We knew that battle was about to happen, but you did not have the security clearance to receive the information." I lost my temper, started a fist fight and was unceremoniously thrown out of the headquarters by a group of MPs. A colonel escorted me to the helipad and ensured that I went back to the jungle, where he thought I belonged. ★

Establishing 'VICTORY' Architecture Standards

By Scott R. Gourley

Sometimes the best way to grasp the significance of a new technology is to view the scope of its planned Army applications. Based on that criteria, one of the more significant emerging technologies identified for application in future vehicle fleet and networking designs will be the Vehicular Integration for Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance/Electronic Warfare (C4ISR/EW) InTerOpeRabilitY (VICTORY) initiative.

According to Scott Davis, U.S. Army Program Executive Officer for Ground Combat Systems (PEO GCS), the VICTORY standard will be included in all upcoming engineering change proposals for existing vehicle fleets, in the Ground Combat Vehicle effort, and in families of computers planned for integration into the platforms of tomorrow.

"If you look largely at the commercial sector, the reason they are able to react very rapidly and get to interchangeable parts is through adopting sets of standards," Davis explained at the February AUSA Winter Symposium and Exhibition in Fort Lauderdale, Fla. "I am proud to say that we, in coordination with PEO C3T [Program Executive Office for Command Control Communications-Tactical], and under the hard work of Southwest Research Institute, have now published what we call VICTORY Architecture 1.1."

Originally envisioned as a way to eliminate many of the problems created by the traditional "bolt on" approach to vehicle upgrade/enhancement, VICTORY will allow tactical wheeled vehicle fleets and ground combat system fleets to recover lost space while reducing weight and saving power.

The initiative began with a kickoff meeting in May 2010. Fourteen months later the VICTORY 1.0 specification was released at the end of July 2011.

More recent framework product releases included publication of the VICTORY A1 architecture in mid-January 2012 and release of standards specification 1.1 on January 31. The enhanced specifications encompass additional subsystems and follow a road map identifying targets for each sequential release.

The VICTORY framework includes an architecture that defines common terminology, systems, components and interfaces; a set of standard technical specifications; and a set of reference designs.

Davis characterized VICTORY as "a framework that really designs or specifies the standards for an internal vehicle data distribution architecture. It's material agnostic, but it really gets to some of the things that we might see in iPhones or in commercial computers, where it now defines—for our platform [people] and all of the network providers—a set of standards that they will find on the [data] bus so that integration will be far easier.

"Today, for example, on some of our platforms you will see multiple GPS devices, because each time another PM [product manager] brought an additional capability to that platform that required accurate timing or position location they came with their own GPS," he said. "Under the VICTORY standard you can look at the framework of the specification, and it will tell you where on the [data] bus to find GPS location and time signals; where to find vehicle orientation; where to find vehicle speed … . So, when you bring a new network component that needs that input, it doesn't have to include those features. VICTORY also provides … physical interface standards to plug in. Overall, this is really helping us drive to a better 'plug and play' capability from the network side into the platforms."

He emphasized that "VICTORY does not bring with it any hardware or software, but it does provide a series of standard protocols and definition of what the [data] bus is. So if you bring a new sensor onto the vehicle, the way it will get its feeds will be over a gigabit Ethernet that is defined by the VICTORY standards."

The VICTORY specifications are being developed by a government/industry standards body, with VICTORY following an adopt-adapt-author methodology in the effort to move towards establishing the common open standards for use within the vehicle and mission system communities.

A recent listing of participants in the VICTORY standards body reflected multiple service program offices across vehicular and electronics arenas as well as more than a dozen members from industry and academia, including U.S. Army Aviation and Missile Research; Development and Engineering Center; C4i Pty Ltd; CACI International; Chugach Industries; Control Point; Curtiss-Wright; DCS Corp; DRS Technologies; GPS Source; Product Manager Joint light Tactical Vehicles; NetCentric Technology; Oakwood Controls; Oshkosh Defense; Product Director GPS; PEO C3T; PEO Combat Support and Combat Service Support; PEO Ground Combat Systems; PEO Intelligence, Electronic Warfare &

Sensors; Raytheon; U.S. Army Research, Development and Engineering Command; Southwest Research Institute; U.S. Army Tank Automotive Research, Development and Engineering Center; Themis Computer; and Tucson Embedded Systems.

One of the representative companies that has been active in the working group and is translating the VICTORY philosophy into hardware solutions is Curtiss-Wright Controls Defense Solutions (CWCDS). At AUSA's Winter Symposium and Exhibition the company presented the first public demonstration of "Poised for VICTORY," its VICTORY 1.0-compliant modular architecture for ground vehicle modernization. The company highlighted the design as "optimally deliver[ing] the full power of a modular open systems architecture (MOSA) to legacy and new vehicle platforms to provide unprecedented levels of commonality and affordability."

According to David Jedynak, technical product manager for Network Centric Systems at CWCDS, the display was reflective of company plans to develop a range of VICTORY-compliant products, including Ethernet switching, security devices, mission recording products, and shared processing units.

"The key thing about VICTORY is that, at the end of the day, it's all about warfighter benefit in the vehicle," Jedynak said. "As we've seen over the last several years of conflict, we have typically had a lot of appliqué/stovepipe systems installed in the vehicles, and whether it's FBCB2 [Force XXI Battle Command Brigade and Below] or another system, each system comes with its own complete set of turnkey gear. There's no sharing."

He continued, "To put it in an office metaphor, it would be as if you had one computer for Microsoft Word, another computer for email, another computer for a Web browser, and another one for Microsoft Excel. Then occasionally you would install a kit that would do PowerPoint. And you would have three different phones: one to call your boss, one to call your colleagues and one to call outside the building. Finally, on top of everything else, each item would have to have its own monitor and its own printer.

"When we start to look at vehicles and what's on the vehicles, there is a lot of that sort of duplication," he said. "We are seeing a lot of 'over burden' on SWAP-C [size, weight, power and cost] for the vehicle. A great example of that is if you have eight different systems on a vehicle that all need GPS, you would currently have eight GPS receivers and eight GPS antennas on top of the vehicle. But then the VICTORY initiative came along and said, 'Let's find a way to create an architecture/design for the C4ISR/EW network on a vehicle.' And the key word there is network."

Jedynak noted that certain accepted industry standards already help to identify things like how to build a line replaceable unit (LRU) in a commercial off-the-shelf (COTS) module, while VICTORY "is about how you get those LRUs to talk to each other. The key thing is that you can start sharing equipment—displays and other resources—so that it is more like a real office environment where you have one of each item and can do a number of different applications. VICTORY is all about making sure that all of the different systems, coming from different vendors with different technologies, are able to interoperate," he said.

Jedynak offered another real-world example of the benefits of VICTORY, involving an acoustic shot detection system, a remote weapon station and an FBCB2.

"Right now, if the shot detection system says, 'Hey, the shot came from over there,' there is shooter location information with that appliqué," he said, "but if somebody wanted to integrate that information with FBCB2 they would have to go over and do it manually. And if they want to point the remote weapon station at that threat, they have to do that manually as well. Those systems have no interconnection.

"Now, looking at a VICTORY example, a generic threat detection system message would be published on the VICTORY data bus," he said. "The FBCB2/Blue Force Tracking sort of application, running on the vehicle, would 'hear' that information and automatically populate that threat, and then the commander could say that he wanted his remote weapon station to 'slew-to-cue' on that threat."

Acknowledging that there are other ways to do this sort of system integration outside of the VICTORY architecture, Jedynak said, "The key thing about VICTORY is that it is a set of government standards adhering to the MOSA philosophy. It ensures that products and technologies from multiple vendors, as well as different organizations within the Army itself, are driving toward the same interoperability standard.

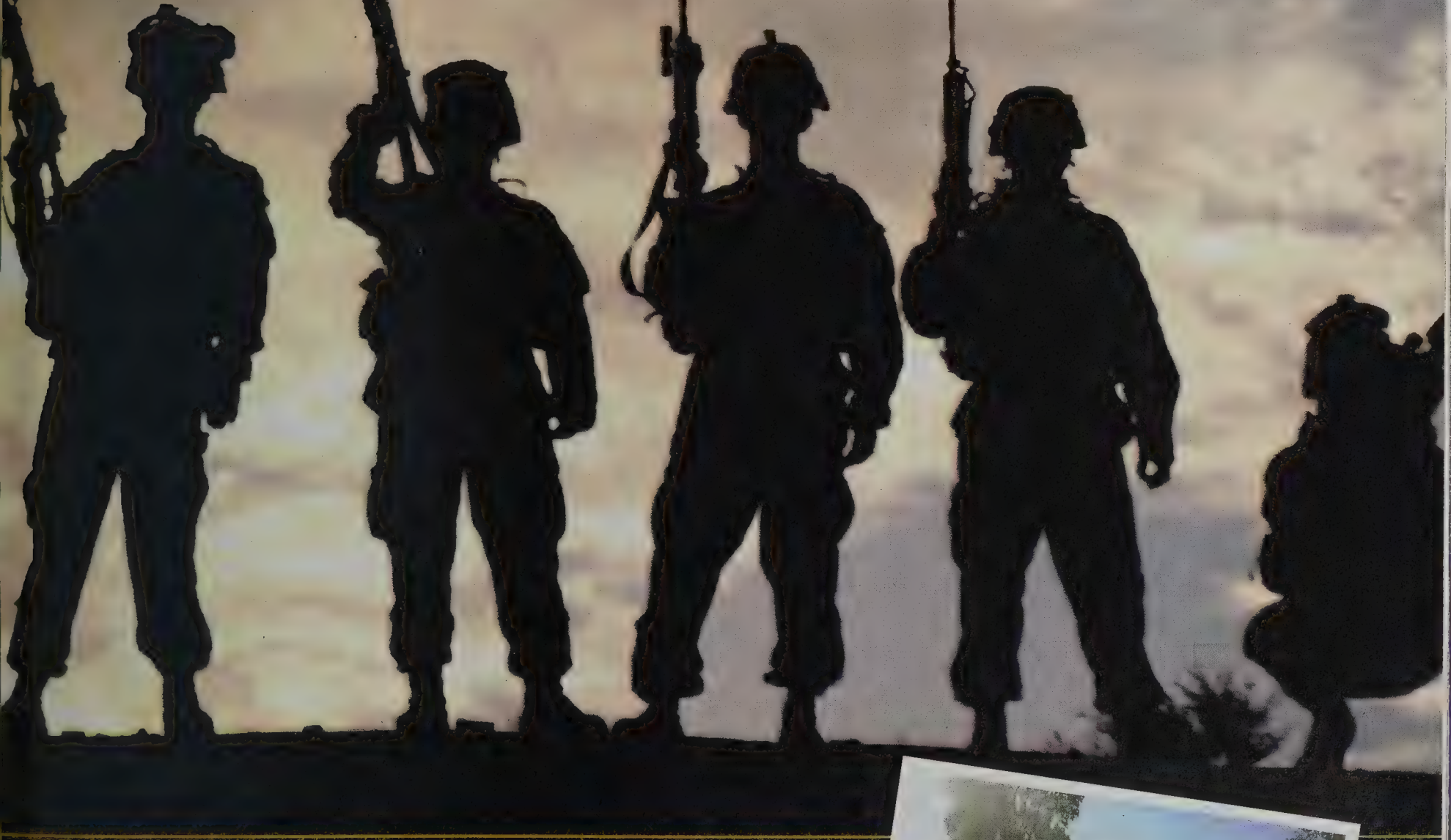
"That doesn't mean that a remote weapon station, a threat protection system, a communications management system, a mission recording system or any of the other things that might be on the data bus, themselves aren't proprietary," he clarified, "but it is saying that their interfaces to the rest of the world are open and standard."

"Our work with VICTORY is part of our long tradition of focusing on open system standards to provide our customers with the greatest possible flexibility," said John Ormsby, Vice President for Marketing and Sales at CWCDS. "We've focused on that for many years. A key part of our business is COTS-based. In fact, our Defense Solutions group is one of the largest providers of COTS solutions in the military electronics market. Nobody has more of those types of products than we do. So our work with VICTORY reflects a continuation of our leadership in that regard. We are happy to see the VICTORY standard come into the Army, and we look forward to taking a leading position in adopting it and using it to our customers' advantage, giving our customers new flexibility and modularity capabilities on various platforms—bridging back to legacy systems and going forward into the future." ★

Scott R. Gourley, a freelance writer, is a contributing editor to ARMY.

NATIONAL MUSEUM
UNITED STATES ARMY

Honoring the Army and Its Soldiers



A great Army deserves a great Museum.

The National Museum of the United States Army, scheduled to open at Fort Belvoir, Virginia in 2015 will be the nation's one and only Museum to present the complete Army's history since 1775. Its immersive exhibits, soldier artifacts, and dynamic venues will tell the stories of selfless service and personal sacrifices of the 30 million American men and women who have worn the Army uniform.

For more information on how to support the National Army Museum, visit us online today!

www.armyhistory.org | **1-800-506-2672**

YOU MIGHT BE AN

By MG Guy S. Meloy
U.S. Army retired

Barracks, ca. 1943, Rocky Mountain Arsenal, Commerce City, Colo.

OLD SOLDIER IF...

You know what push-pull-tap-aim-fire means, what B- and K-rations are, you've made C-ration coffee in an aluminum canteen cup, never heard of an MRE, wore and probably still have an Ike Jacket, and when you retired, the insides of at least one pair of boots were still brown.

You remember white and black name tapes and gold and black U.S. Army, company mess halls before dining facilities, catching your thumb while closing the bolt of an M1 rifle at least once, and what an M1919A6 is.

You maxed 75 nonstop jumpin' jacks, fired a water-cooled machine gun, remember when the Army song belonged to the field artillery, knew what a Class A Agent was (what he did and how he did it), survived hundreds of miles bouncing cross-country in a weird contraption someone named a "jeep," failed haircut inspections the day after getting a haircut, one of your most valuable possessions was the P38 you added to your dog tag chain, wore an "overseas cap," and infantry was trained to form skirmish lines for the final assault of an objective.

You remember T7 parachutes and C-119s, paydays when every soldier was paid every month individually and in cash—even in combat. You have "stood" all-ranks reveilles and weekly retreat formations, remember when first sergeants completed morning reports in pen and ink, when company orderly room walls had pass boxes kept under locks that only the first sergeant could open, when off-post "From Retreat to Taps Only" passes had to be approved by platoon sergeants, and when MPs inspected every bus leaving the post to make sure every soldier was in a Class A uniform and had a valid pass.

Football locker rooms offered more privacy than the exposed side-by-side toilets in the (wooden) barracks, where squads and platoons slept in an open "floor plan" of iron cots, metal wall lockers, wooden footlockers, and 4-by-4 support poles down the center supporting the roof. Saturday morning inspections of barracks

Photographs: Library of Congress

The M1 bazooka, among the first rocket-propelled antitank weapons, was used in World War II and Korea.

Above, an early Jeep—the Bantam BRC40 4x4 Light Reconnaissance Vehicle. Left, field rations in 1943.

and troops in ranks were an Army-wide standard, and while pistols and machine guns were secured in an arms room, rifles were stored in arms racks on each floor of barracks that were heated with coal-burning furnaces in the winter and cooled in the summer by opening the windows.

The Army never heard of Social Security numbers. You distinguished Regular Army (volunteer enlisted) soldiers from drafted soldiers because regular soldiers had "RA" before their serial number whereas drafted soldiers had "US," and Regular Army officers had five-digit serial numbers, while reserve officers had as many as 10. You also remember when there were Spec 4s but no corporals, when the Army added pay grades E-8 and E-9, and even a time when soldiers were referred to by rank rather than their pay grade.

Old soldiers wore OG shirts, HBT fatigues with buttons (not zippers), brown shoes and socks, brown hats, brown belts with brass buckles, parkas lined with sheepskin, and bunny rabbit fur pile caps. Individual equipment was issued as TA-21 instead of TA-50, supplies of all kinds were accounted for by MRs and hand receipts and recorded at company level by fountain pen in property and component parts books. Field orders were printed on mimeograph machines, large sheets of tracing paper were taped over 1:25,000-scaled maps for grease-pencil-drawn overlays of fire and maneuver schematics. No one had ever heard of a computer, but every supply and mess sergeant had an adding machine, and company clerks armed with manual typewriters used boxcar loads of carbon paper to make everything in three copies.

---

*MG **Guy S. Meloy**, USA Ret., served in various command and staff positions over the course of his Army career. He commanded four platoons, three companies, two battalions—one for six months as a major, the second for 12 months as a lieutenant colonel, both in Vietnam—and a brigade. He was an assistant division commander and commander of the 82nd Airborne Division as well as director of training in the Office of the Deputy Chief of Staff for Operations and Plans.*

If you said "High Port and Cross Over" troops knew what you meant and went the other way, combining ponchos and gas masks was called MOPP-4, you filled your canteens from a Lister Bag, had to "zero-beat the blankety-blank PRC-10," clumsy-to-hold-and-sometimes-they-even-worked PRC-6s were issued to squad leaders, and troops of all ranks in the field shaved in their helmets and drank iodine-flavored water from aluminum canteens that invariably had at least one dent and usually more.

Soldiers carried .45s, M1s, M2s, BARs, 2.36-inch and later 3.5-inch bazookas, 57 mm and 75 mm recoilless rifles, wore pistol and ammunition belts with a dozen pouches to hold 8-round clips of rifle ammo, "pulled KP," dug latrines, did PT runs in combat boots, and some enjoyed the C-ration cigarettes issued with every meal. They washed their aluminum mess kits in immersion heaters, rode Half-Tracks, M59s, H-19s and H-34s, and many company commanders and senior NCOs had fought in World War II as well as the Korean War.

Were these old soldiers good soldiers? Were they tough physically and tough mentally? Were they well-trained? Yes. In their time, using the equipment and weapons of their day, they were exceptional soldiers, proud soldiers, dedicated soldiers, and they made an exceptional Army. Are the soldiers of today as good? Of course. In fact, they are probably better in many ways because they have better training and more advanced equipment and weapons. More to the point, most have experienced more days of combat than any soldiers in our Army's history.

I predict that 30 or more years from now, some soldier serving today will write a new version of "You're an Old Soldier If ..." and I'll bet it will be loaded with names, numbers and nomenclatures that will cause soldiers in, say, 2050 to roll their eyes the same way I suspect the soldiers of 2012 who happen to read this are rolling their eyes. I know I did when I read a similar article written more than 50 years ago by an old soldier who once wore wrap-around leggings, invented the term "doughboy" and fought World War I with a 30.06 Springfield rifle. ★

2012 ARMY Magazine Photo Contest

Sponsored by the Association of the U.S. Army

The Association of the U.S. Army is pleased to announce its annual ARMY Magazine photo contest. Amateur and professional photographers are invited to enter.

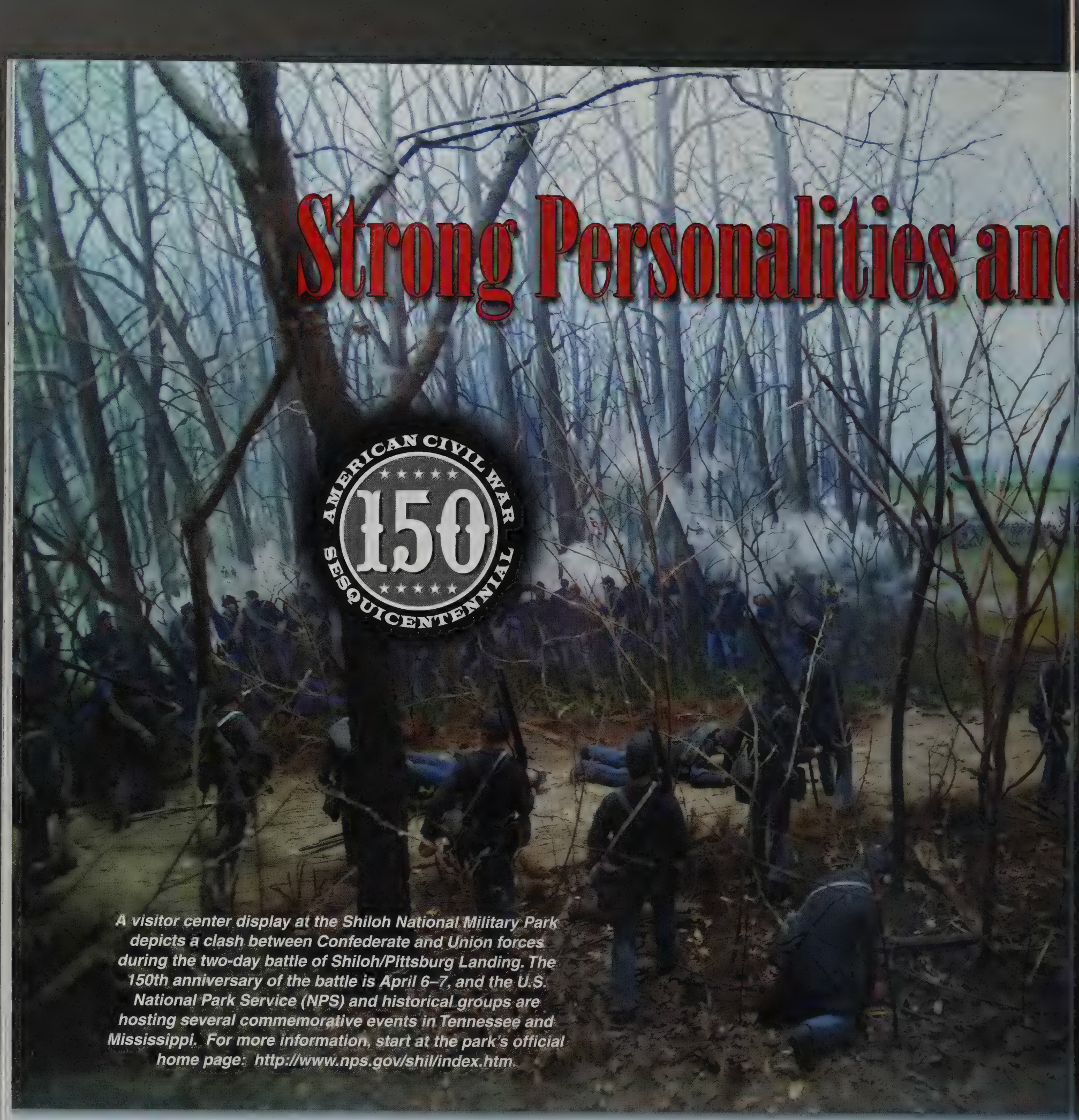
The winning photographs will be published in ARMY Magazine, and the photographers will be awarded cash prizes. First prize is $500; second prize is $300; third prize is $200. Those who are awarded an honorable mention will each receive $100.

Entry Rules:

1. Each photograph must have a U.S. Army-related subject and must have been taken on or after July 1, 2011.
2. Entries must not have been published elsewhere. Evidence of prior publication of any entry will disqualify it.
3. Each contestant is limited to three entries.
4. Entries may be 300 dpi digital photos, black-and-white prints or color prints. Photographs must not be tinted or altered. (Send digital photos to jwascher@ausa.org.)
5. The minimum size for prints is 5x7 inches; the maximum is 8x10 inches (no mats or frames).
6. A sheet of paper must be taped to the back of each entry with the following information: the photographer's name, address and telephone number, and caption information.
7. Entries must be mailed to: Editor in Chief, ARMY Magazine, 2425 Wilson Blvd., Arlington, VA 22201-3385, ATTN: Photo Contest.
8. Entries must be postmarked by July 31, 2012. Letters notifying the winners will be mailed in September.
9. Entries will not be returned.
10. Employees of AUSA and their family members are not eligible.
11. Prize-winning photographs may be published in ARMY Magazine and other AUSA publications three times.
12. Photographic quality and subject matter will be the primary considerations in judging.

For further information, contact Jocelyn Wascher (jwascher@ausa.org), ARMY Magazine, 2425 Wilson Blvd., Arlington, VA 22201; (703) 907-2604.

Strong Personalities and



A visitor center display at the Shiloh National Military Park depicts a clash between Confederate and Union forces during the two-day battle of Shiloh/Pittsburg Landing. The 150th anniversary of the battle is April 6–7, and the U.S. National Park Service (NPS) and historical groups are hosting several commemorative events in Tennessee and Mississippi. For more information, start at the park's official home page: http://www.nps.gov/shil/index.htm.

The Union's building-block advance of its western strategy arrived in the late winter of 1862 at Pittsburg Landing, Tenn., which was not much more than a wide muddy spot on the banks of the Tennessee River that provided a notch between bluffs on its flanks. A tiny roughhewn-log Methodist meeting house was perched on a hillside above, and the churchyard had been given the name Shiloh for the biblical place of peace. Confederate and Union forces, led by generals and senior officers of compelling personalities and histories, would visit upon it battle, blood and death for two days. The military objective lay some 25 miles away at Corinth, Miss. [For a timeline account of the battle, please see "Historically Speaking," page 86.]

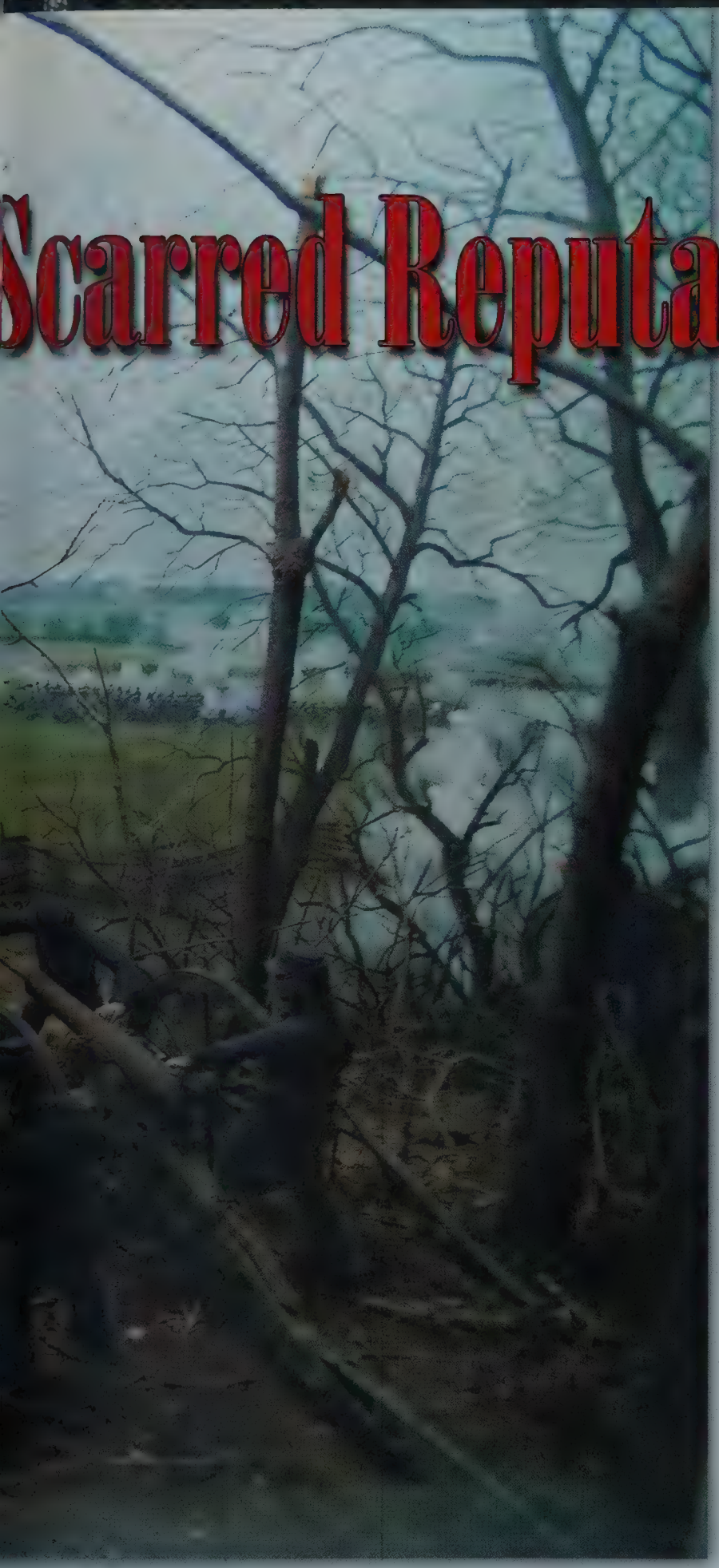
The Principals and Strategies

Union forces under recently promoted MG Ulysses S. Grant encamped on the wooded knolls and grassy flats above Pittsburg Landing to drill green regiments and wait to link up with forces under MG Don Carlos Buell, coming (albeit reluctantly and slowly) from Columbia, Tenn., with three divisions to make a combined attack on Corinth.

The Confederate army knew the importance of the Corinth rail center and concentrated a force of its own to defend it, reinforcing it from various points and dispatching the Confederacy's overall western commander, GEN Albert Sydney Johnston, to command its defense.

Johnston, a tall, burly frontier fighter with a wide gentlemanly streak, was a friend of Jefferson Davis, president of

Scarred Reputations at Shiloh



Text and Photographs
By Dennis Steele
Senior Staff Writer

the Confederacy, and the general whom he considered the most able on the South's rolls at the time. At the war's outset, Johnston resigned his federal commission in California and made a perilous trek across the country that eventually landed him in Richmond, Va., where Davis commissioned him as a full general, giving him command of the western department with responsibility for all or parts of seven states, stretching from the Appalachian Mountains to Indian Territory in today's Oklahoma.

During his time in command, Johnston's fighting abilities had failed to fulfill expectations, and his reputation had been severely marred. Troops throughout his command had suffered a series of defeats and setbacks and withdrew all along the department's front. Among them were the losses of Forts Henry and Donelson, where about 12,000 of his men became prisoners. In addition to control of the Tennessee and Cumberland Rivers, Federal control at Donelson/Henry also created a Union salient that divided Johnston's two main forces in Kentucky, making their positions that much more untenable.

The failure of this offensive into Kentucky and the collapse of his defensive line ceded neutral Kentucky to Union control for the time being and forced the Confederates to withdraw to Tennessee. Later, Johnston ordered a withdrawal from the important center of Nashville, which allowed Federals to take the city easily, adding to the wholesale criticism poured upon him.

Since taking command, Johnston had pleaded for reinforcements in the contested portions of his department, but none arrived to give him the strength to blunt the Union's two wings of advance from Kentucky and a major base that had been established on the Illinois side of the Mississippi River at Cairo (pronounced KAY-row by local custom).

Davis suddenly realized the perilous situations facing Johnston in Tennessee and Mississippi, especially concerning Corinth, so he sent reinforcements, along with trainloads of supplies, to consolidate with Johnston's field army.

GEN P. G. T. Beauregard had been transferred from Virginia to be Johnston's deputy just as Confederate efforts in Kentucky broke down. Beauregard was cocky and pontificating. He was given to shooting off his mouth in an endless stream of breathless dispatches and wildly ambitious plans to Davis. The Confederate president apparently decided to put some distance between them under the smokescreen of bolstering the west.

Fresh off the victory at Donelson/Henry, Grant was popularly tagged Unconditional Surrender Grant for the terms of surrender he imposed at Fort Donelson. Grant's immediate superior, MG Henry W. Halleck, commander of the Department of the Missouri, tried to hijack some credit for the Donelson/Henry victory, but what he really wanted was overall command of the Union's western theater, taking under him the Department of the Ohio, commanded by Buell. Halleck and Buell had fought a simmering feud as separated commanders, each refusing for transparent reasons to cooperate with the other in a coordinated campaign.

Halleck was an acclaimed military scholar and lecturer

Clockwise from right, the Shiloh battlefield's "Bloody Pond" (http://goo.gl/BFuiL, http://goo.gl/osr4X) where the water ran red. A mass grave for Confederate soldiers who fell during the battle is memorialized within the battlefield park. The interior of the reconstructed Methodist meeting house: The location was called Shiloh for a "place of peace," but around it the battle centered.

and had taught classes while still a cadet at West Point. He later was sent to Europe to study military tactics, and was posted to California during the Mexican War, where his scholarly reputation grew. He studied law, resigned his commission and became a wealthy attorney and land speculator. He was recalled to active duty when the Civil War began and commissioned as a major general. He was called Old Brains behind his back, which cannot be viewed as complimentary. Halleck's personal command goals seem twofold: expand his command and shuck off any blame that came his way. Grant was his constant nemesis.

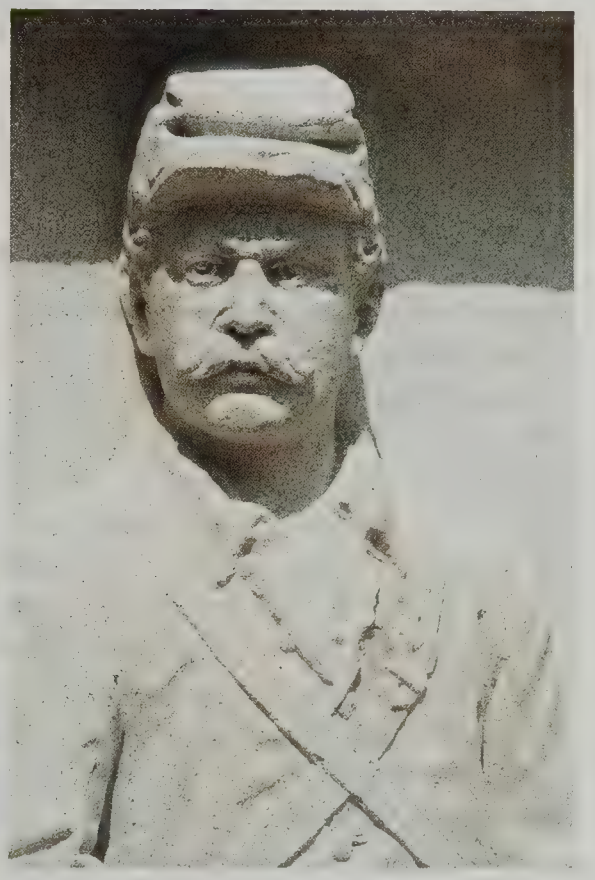
Finally, after a lot of wrangling, Halleck got his wish, consolidating the Departments of the Missouri and the Ohio under his command, which was renamed the Department of the Mississippi. Buell was given command of the subordinate Army of the Ohio (later renamed the Army of the Cumberland).

Despite success and instant fame—his image graced the cover of *Harper's Magazine*—Grant remained a magnet for trouble. In the weeks following the Donelson/Henry victory, Grant's reports to Halleck stopped. Angered, Halleck complained up the chain of command loudly and repeatedly about his insubordinate subordinate. He was still jealous of Grant making the headlines, which added to his anger, and he surmised that Grant was absent or drunk or both and said so via every communications capability at hand—telegraph, letter, shouting and cussing. It turned out, however, that Grant *had* been making reports, but they were held back by a telegraph operator who was a Confederate sympathizer. Ultimately, Grant retained his command, and Halleck gave the green light to the Corinth plan and the move to Pittsburg Landing.

Grant had alongside him then-BG William T. Sherman, serving as a division commander and Grant's de facto field deputy although other division commanders outranked him. Grant and Sherman were considered a drunk and a crazy man, respectively.

Sherman had recommended Pittsburg Landing to Grant as the debarkation point for the troop transports, largely because of the fields it offered to train for the upcoming attack and the especially open campsites, which turned out to be a recommendation that carried significant negatives for defense.

Sherman had been commissioned a brigadier general of volunteers in May 1861 and at the time had seniority in



Top left, cannons line a visitor's driving tour location at the Shiloh National Military Park. Bottom, left to right: Cannonballs mark the location of the Confederate mass grave. The 68th Ohio Infantry Regiment monument depicts a "minnie ball," and a soldier's image is a detail on the 91st Ohio Infantry Regiment's memorial. (Find the Shiloh NPS monument locator at http://goo.gl/anH0F.)

rank over Grant. Subsequently, Sherman was assigned to the Department of the Cumberland, headquartered in Louisville, Ky., and eventually he was given command of the department. The Confederates still held a line between Columbus and Bowling Green, Ky., extending to the Cumberland Gap at the juncture of Tennessee, Kentucky and Virginia. Sherman's hopes for success in dislodging the Confederates and keeping Kentucky out of the Confederacy's grip dimmed. He telegraphed complaints to Washington, citing all manner of obstacles and shortages while providing an exaggerated estimate of the impact of the enemy. Suffice it to say that he had dropped into a funk; rumors circulated that he was a madman "crying wolf," according to the *Cincinnati Commercial*. Halleck put him on medical leave. Buell replaced him and cleaned up the mess.

After months at home, Sherman was cleared to whatever degree necessary or convenient, and deemed not to be insane but merely talkative and high-spirited. He returned to duty under Halleck, occupying rear-echelon assignments, finally providing logistical support from a base at Paducah, Ky., which enabled Grant to take Donelson/Henry. Professing a strong desire to serve directly under Grant and further repair his reputation, Sherman was given command of the 5th Division in Grant's army.

Sherman was determined never again to express anything that would smell of exaggeration or in any way make him appear skittish in the face of the enemy during his second chance at field command. That caused its own set of problems at Shiloh, when he discounted and disregarded reports of the enemy moving against his division so as not to appear nervous. He even accused one of his regimental commanders of crying wolf and being shaky. (When a Confederate shot dropped one of Sherman's orderlies and rebels charged out of the wood line, he suddenly became convinced.)

Word had reached Confederate headquarters at Corinth that Federals under Grant were landing, threatening the city. It was also known that Buell was on the march but had not yet joined Grant, a situation that gave the Confederates superior numbers, at least temporarily.

Beauregard arrived at Corinth before Johnston and eventually set the wheels in motion to attack Grant while attack favored the Confederates. Beauregard was a short, dapper French Creole from Louisiana who was called the Napoleon of the South—often unfavorably, but that's not how Beaure-

The Tennessee State Memorial is dedicated to the state's soldiers who fought at Shiloh.

gard took it. Indeed, he implemented a plan used by Napoleon—to attack and defeat one wing (Grant) and then turn to defeat Buell during his march.

Upon arrival, Johnston eagerly bought into Beauregard's plan, dismissing contrary opinions. As Johnston saw things, the plan could drive the Federals out of Tennessee. He was determined to take the battle to the Yankees at Shiloh come hell or (literally, in this case) high water, and he would lead the fight (again, literally), which would get him killed.

About midday on the first day of the battle, a shot nicked the back of Johnston's knee, clipping an artery. His wound was discovered too late to save him.

The Supporting Cast—Confederates

An eclectic group of senior generals had been gathered at Corinth to fight under Johnston at Shiloh.

Braxton Bragg ... was a short-tempered disciplinarian who fought with his own staff, subordinates and superiors as much as the Federals. He was disagreeable, quarrelsome and quick-tempered, and he demanded strict adherence to rules and orders (especially his own). Bragg had served with distinction during the Mexican War. He led the Confederate attack at Shiloh's "Hornet's Nest," and he would be promoted after the battle to full general, serving as Beauregard's second in command in the western theater.

Earl Van Dorn ... was an erstwhile poet and painter, in addition to being a career military officer. He was also a dedicated womanizer, which would lead to his murder in 1863—shot in the back of the head while sitting at his desk by a jealous and humiliated husband who was never brought to trial.

William J. Hardee ... was a respected career officer. He served as Commandant of West Point from 1856–1860, resigning his commission in 1861 to join the South. He later attempted to defend his native Georgia against Sherman's March with forces at his disposal. He was pushed back to Savannah, evacuating the city as Sherman moved on it.

Leonidas Polk ... was an Episcopal bishop, planter and close friend of Davis. He had attended West Point but held no prior military command experience to speak of, resigning his commission to attend theology school. Purely a political general, he squabbled with Johnston and fought bitterly with Bragg. His motives and abilities were suspect among his peers. Johnston's roommate at West Point, Polk seemed resentful of Johnston's superior command position, offering his resignation before Shiloh, which Davis refused.

John C. Breckinridge ... was a former Vice President of the United States (1856–1860) and ran against Abraham Lincoln's ticket in 1860 on a pro-slavery platform. Under his Plan B, he was elected as a senator representing his native Kentucky and was expelled from the Senate for his pro-South stance once secession began. He hated Bragg (like most people), and Bragg particularly hated him and tried, unsuccessfully, to cashier Breckinridge as a drunkard. He commanded the Confederate success at the Battle of New Market (Va.), served under Lee in defense of Richmond and took part in Jubal Early's raid against Washington.

A memorial honoring the 12th Iowa Infantry Regiment sits astride the sunken road (called the Hornet's Nest by Confederates), which was the main line of defense that blunted the Confederates' attack on the first day of the battle. (See the NPS account at http://goo.gl/q5q73.)

Davis appointed Breckinridge as the last Confederate secretary of war. By that time, Breckinridge saw the futility of further bloodshed and worked to some extent behind the scenes to engineer an honorable surrender. Before the fall of Richmond, he protected and preserved the archives of the Confederacy, ensuring that the whole collection would be captured intact for history. Breckinridge fled Richmond alongside Davis, but the two were separated during the chaotic flight. Breckinridge feared trial for treason and successfully fled the country to Cuba and on to Europe, returning under amnesty in 1869.

Nathan Bedford Forrest ... was a lieutenant colonel and an imposing figure of a man who stood 6 feet 2 inches at a time when the average height of a man was about five-and-a-half feet. Forrest commanded a cavalry regiment/mounted rifle battalion. He had no formal education to speak of, but he had gall, grit and street smarts and became wealthy as a planter and slave trader. Unschooled in military tactics, he made things up as he went along—and they worked. He was unconventional in every sense and can be called a special operations leader of his day.

After the first day's fighting at Shiloh, Forrest heard the clanking and puffing of steamboats (Buell's transfer across the Tennessee River) and sent scouts clothed in Union uniforms to investigate, confirming Buell's arrival. He took the news to headquarters but was told to find Beauregard, whom he never found. Thus the information did not get to where it might have done some good.

Forrest also screened the Confederate withdrawal after the second day of the battle. A couple of Union regiments under Sherman dogged Beauregard's retreat for a short distance and encountered Forrest's cavalry. Forrest ordered a charge, clashing against the astonished Federals. In the ensuing struggle, he was shot (the bullet lodged against his spine). Wounded, Forrest spurred his horse, grabbed a Federal and pulled him up to serve as a shield, making good his escape and rejoining his cheering men.

Forrest would be a thorn in the side of Grant and Sherman throughout the conflict and end the war as a lieutenant general, commanding a mobile force that struck and harried the Federals. Forrest would be better regarded today had he not become the father of the Ku Klux Klan during Reconstruction. He was an unrepentant racist.

The Supporting Cast—Federals

Fighting alongside Grant, Sherman and Buell were gentlemen of a different persuasion.

A marker inside today's Shiloh National Cemetery designates the location of Grant's headquarters during the night of April 6, 1862. (See the NPS site at http://goo.gl/WzGHR.)

John A. McClernand ... was an attorney and politician from Illinois. He served in Congress and was an ally and friend of Lincoln (his wife was a close friend of Mary Todd Lincoln). He resigned from Congress to raise a brigade in Illinois and fought under Grant at Donelson. Owing to his political connections and inclination to speak his views to the press whenever he could, which was often, he was Grant's irritating rival. He would continue to serve under Grant until the last stretch of the Vicksburg campaign, when he spread rumors in the press about Grant's continued drunkenness in a bid to unseat him. The opportunity for which Grant had been waiting came when one of McClernand's press leaks directly broke regulations (and Grant had amassed enough political influence of his own to take on McClernand). Grant fired him.

William Hervey Lamme (W.H.L.) Wallace ... volunteered for service as a private in the 11th Illinois Regiment and subsequently was elected its colonel. He also was a friend of Lincoln, and Grant liked him and considered him to be an able commander. He had fought bravely and well at Donelson and was appointed brigadier general for his actions. His division fought hard at Shiloh, occupying a position beside Union Forces at the Hornet's Nest, so-called by the Confederates due to the buzzing rate of fire that rained into their ranks. Suffering heavy casualties, his division was surrounded, and Wallace ordered a withdrawal, getting many of his men out of the deathtrap. Wallace, however, did not escape and lay mortally wounded. His men found him, and he was evacuated to Grant's headquarters where Wallace's wife tended him until he died. Wallace was buried in Illinois, and the horse that had carried him into battle at Shiloh (Prince), which also fell in battle, is buried beside him.

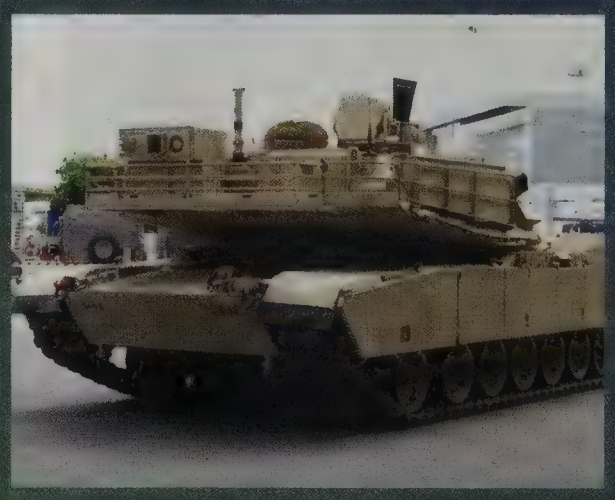
Lew Wallace ... (no relation to W.H.L. Wallace) was an Indiana lawyer and politician, serving in the state legislature and appointed as Illinois Adjutant General at the start of the Civil War. Later he was given command of the 11th Indiana Regiment. His regiment had reinforced and helped save McClernand at Fort Donelson (acting against orders), and he was promoted for it. Heralded at Donelson, he fell from grace at Shiloh. His division was separated from the main force, guarding a supply landing some five miles away on the opposite side of the Ten-

ASSOCIATION OF THE UNITED STATES ARMY

USA PAVILION

AT 2012 EUROSATORY

11-15 JUNE 2012 / PARIS



Book Your Space Now for the USA Pavilion

www.ausa.org

EUROSATORY
11 - 15 JUNE 2012 / PARIS

For USA Pavilion information and stand booking contact:

LexaLynn Hooper
Manager, USA Pavilion
T: +1 703 907 2666
E: lhooper@ausa.org

Amy Frankenstein
Sales, USA Pavilion
T: +1 703 907 2413
E: afrankenstein@ausa.org

U.S. COMMERCIAL SERVICE
United States of America
Department of Commerce

A cannon's plaque notes the number of Union soldiers interred after the battle.

nessee River with one brigade detached at another location. As the battle started, so did a blurry and much-argued reputation-changing episode for Wallace. The episode is convoluted, complicated and has remained somewhat controversial, but the overview is that possibly due to miscommunication between Grant and Wallace, as well as the latter's poor choice of marching route, Wallace's troops missed the first day of the battle. The result was that blame rained down on Wallace, especially from Halleck, who was deflecting blame as fast as he could after the battle, and that made big headlines. Wallace continued service (though not as a field commander under Grant), but his reputation was forever damaged. He never accepted responsibility for the incident, always pointing his finger at Grant.

Stephen A. Hurlbut ... was born in South Carolina and served in the Second Seminole War. He moved to Illinois, establishing a law practice and serving in the state legislature. A Lincoln supporter and trusted confidant, Hurlbut went on a fact-finding mission for Lincoln to Charleston, S.C., during the Fort Sumter siege. Lincoln based his initial decision to not resupply Sumter largely on Hurlbut's report. Hurlbut was pretty much a steady hand throughout the Civil War, and on occasion he distinguished himself, going on to command a corps in the west and then assume command of the Department of the Gulf, holding that position until the end of the war. He endured charges of misappropriation of funds within his department, but survived them.

Benjamin M. Prentiss ... was a Virginian who sided with the Union and took a commission, eventually joining Grant's command as a division commander. Apparently, Prentiss and Grant did not get along well, before or after Shiloh, but based on his actions on the first day of the battle, Prentiss can be called a hero. His division—pushed back like the others—fell into a defensive position along the stretch of sunken road, which came to be called the Hornet's Nest. Prentiss' division put up a determined defense, repelling a dozen attacks until the Confederates brought up a line of 32 cannons and southern regiments enveloped the division's position. Finally, after hours of fighting and no chance for retreat, he surrendered his remaining 2,200 men (of more than 4,000 who started the fight). The strategic contribution was that Prentiss' division inflicted many casualties during its stand, held up the overall attack (giving Grant time to regroup farther back) and ran the Confederates out of momentum and daylight, which went far to save the Federals (and Grant) and allowed time for reinforcements to arrive. Prentiss later would be released in a prisoner exchange.

Grant never gave Prentiss' division (or Prentiss) much acclaim for the stand, but the division's veterans ensured their own place in history after the war, staging what can be called a public relations campaign with ceremonies, monument raisings and recountings of the battle that carved a place for them in American military lore.

The Denouement

Despite not having been routed during the first day's savage onslaught—making a fighting withdrawal, regrouping and filling in the line with reinforcements to counterattack the next day, driving the Confederates from the field—Grant took most of the heat after the battle. He was chided for having prepared no defense and not following the retreating Confederates wholeheartedly enough when they pulled back (although his orders from Halleck generally prevented him taking offensive action without permission). For the whole weight of the battle, including the massive casualty toll, some powerful congressmen petitioned for Grant to be relieved of duty. Grant had many detractors within the Army and Congress, but he needed only one person on his side as it turned out: President Lincoln. Halleck, nevertheless, removed Grant from field command and made him his deputy for the subsequent attack on Corinth.

Halleck, eventually, would be kicked upstairs to become the commanding general of the Army in a move to make a place for Grant to command in the west. In March 1864, Halleck was designated the chief of staff and Grant was named commander of the Union armies for the rest of the war.

Through it all, Grant stoically soldiered on. He always beat the odds stacked against him—personal, political or military—and that was his great strength. ★

The Association of the United States Army's Institute of Land Warfare

ARMY SUSTAINMENT SYMPOSIUM AND EXPOSITION

A Professional Development Forum

Army Logistics: Sustaining the Decisive Force – 2020

8-10 MAY 2012

The Greater Richmond Convention Center
Richmond, VA

Register online at www.ausa.org

FOR MORE INFORMATION CONTACT
AUSA, Industry Affairs: 800-336-4570, ext. 2416

CompanyCommand

Building Combat-Ready Teams

To: Company Commanders
From: Company Commanders

Tips for Working Effectively with our JIIM Partners

Have you ever lived on a forward operating base run by Marines? Had a Navy explosive ordnance detachment (EOD) team embedded in your unit? Relied on an Air Force joint tactical air controller (JTAC) for your fires? Pulled security for State Department personnel? Coordinated with a World Food Program worker? We don't receive joint credit for it, but we sure are interacting often with other-than-Army people and organizations in our respective battle spaces.

For the sake of this discussion, assume that your younger brother just took command of a company deploying to Afghanistan. You know from experience that he is going to have a steep learning curve working with sister services, government agencies and nongovernmental organizations. What advice do you have for him about effectively working with the many JIIM (joint, interagency, intergovernmental, multinational) people and organizations with whom he'll be partnering?

Brandon Soltwisch

D & HHC 1-77 AR

As a company commander in Iraq, I was "partnered" or worked with Department of State, provincial reconstruction teams [PRTs], police transition teams, military transition teams [MTTs], the U.S. Agency for International Development [USAID], contracted civilian police trainers, law-enforcement professionals and Air Force explosive ordnance detachments [EODs]. This is my advice based on my experiences with that very diverse group.

Drop the ego, company commander, it isn't about you. Many times you will have to make the extra effort to initiate and cultivate relationships. If you know that up front, it shouldn't be a surprise. Many people you work with will outrank you and will demand respect; give it to them. Accept the fact that sometimes you will have to take a back seat and put another agency forward. Support them and they will likely support you; don't worry about who gets the credit. Candid and respectful conversation will eventually lead to mutually beneficial relationships that will keep things moving in a positive direction. As soon as finger-pointing starts, you are done.

Nobody likes to be the odd man out; bring everyone in and put them on your team regardless of rank, position, service or agency. The best units are inclusive, not exclusive. At the end of the day, your partners are all there for a reason; it helps to understand that reason from their perspective. Invite them to your company meetings, ask for their input in setting goals and priorities, include them in decision-making, and above all else, treat them with respect. Once they are in "your world," try and become part of theirs.

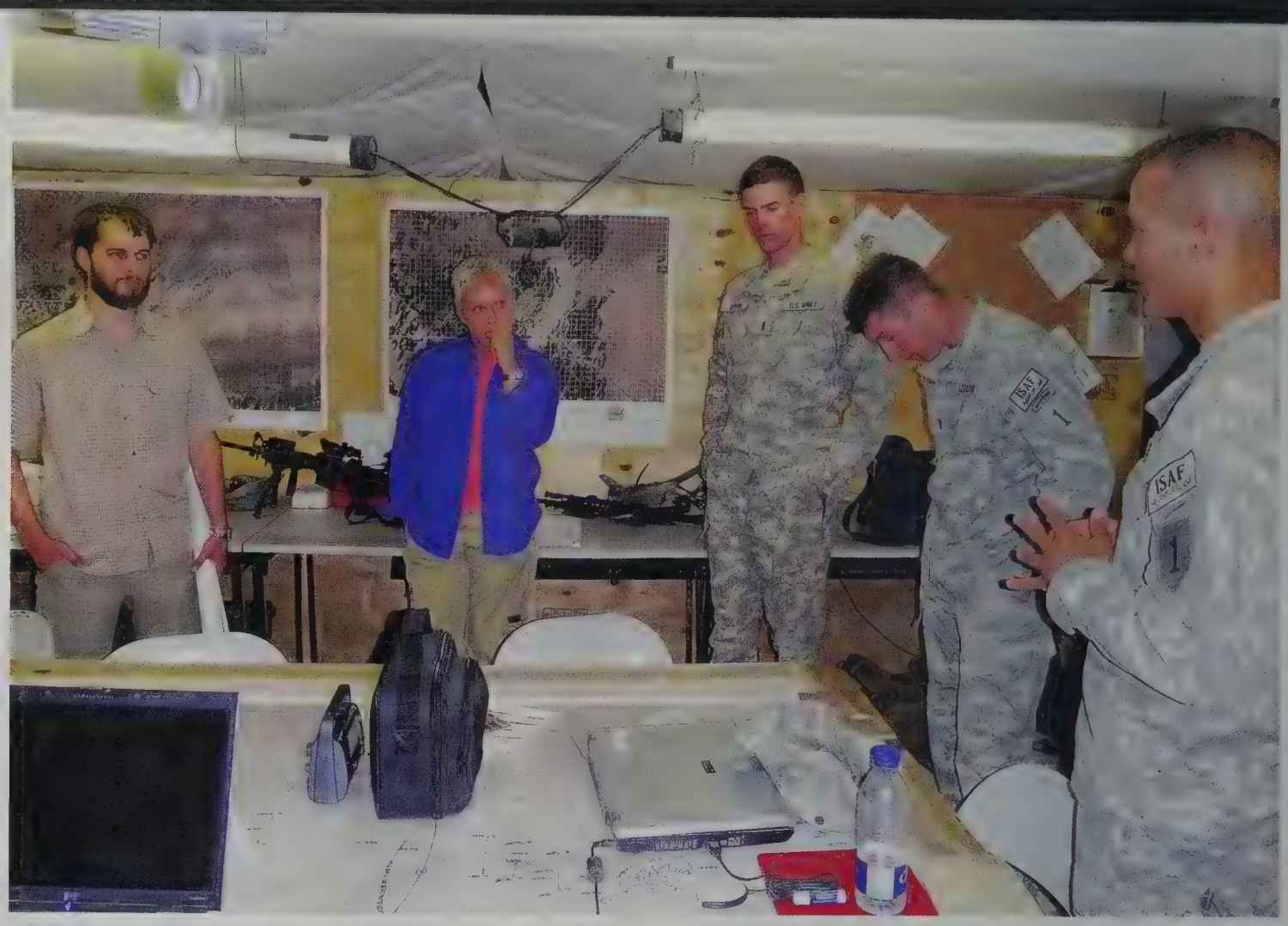
Develop a combined vision for operations and success. At the company level, sit down with the leaders of all partnered units and have an honest conversation about expectations. It's not easy to talk to a colonel or civilian senior executive about the world as you see it, but if you keep the discussion focused on the business at hand, most people will respect you for it. Setting expectations up front about attending patrol briefs, preparing manifests 24 hours before movements, etc., will pay huge dividends later. That way, when one of their subordinates and one of your subordinates have a dispute prior to or during a patrol, you will be only one office visit or phone call away from getting things straightened out from both ends in a hurry. Don't be the guy who has to have the brigade or battalion commander adjudicate your squabbles.

Listen more, talk less. There is a wealth of experience in these enablers, and probably a lot of continuity in your area of operations, too. You are missing the boat if you don't ask the right questions and use them to their maximum potential.

Trevor Voelkel

C/2-2 IN

I was an Infantry company commander in Afghanistan from 2008–2009. Our company was on our own combat outpost and we had an Air Force EOD team, a USAID team,



CPT Trevor Voelkel (right) and two of his lieutenants meet with U.S. Agency for International Development representatives attached to his Infantry company in Afghanistan.

U.S. civilian police mentor and Canadian Civil Military teams. We also had other State Department, Drug Enforcement Agency and FBI personnel at different times for shorter periods. Here are my three biggest lessons learned from this experience.

Understand the goals of the attached/partnered individuals. Why are they here? What are their motivations for being here? What makes their bosses happy? What rewards and incentives exist in their organization to help you motivate and inspire them? If you can look at their situation from a 360-degree perspective, it will help you facilitate a positive relationship and mission success.

Rehearse, rehearse, rehearse! Before every patrol, ensure all non-Army personnel arrive early since they will be less familiar with your unit's SOP. Don't just tell them, "If we make contact, just stay in the vehicle or just get behind me and you will be okay." As we know, situations are fluid outside the wire, so have a plan and rehearse it with them. Speak in terms that they understand, and make sure you get some form of confirmation brief or acknowledgement that they are comfortable with the plan and actions on contact.

Build the team. Include them in everything you do, whether a pickup football game or mission debrief. Once they become attached to your unit, they are your unit. Make them feel at home while taking into consideration their unique perspectives on the world. They are experts in their field and will add value to every discussion.

It is nothing new for Army leaders to manage different personalities in an organization. Use those skills and always maintain a positive attitude towards the relationships and situations.

Justin Oliver
A/1-150 AHB

I'm in the National Guard and have deployed three times. All three times, I worked in task-organized joint task forces that included Special Operations Command [SOCOM] units, Navy units, USAF JTACs, and/or lots of State Department types.

My number-one recommendation is: Get to know the people who are really in charge in those units. Know that NMCB [Naval Mobile Construction Battalion] teams are run

Army National Guard CPT Justin Oliver (right), who has deployed three times working with task-organized joint task forces, says, "If you don't … work well with others, you're in for a short-lived career."

As HHT commander for a brigade headquarters that included State Department, Air Force and media embeds, CPT Olivia Nunn treated the lead members as equal members of the team and made it clear "that they were required to follow the same rules as those given to the troops."

by the Chiefs, and 1st Classes do all the supervising and actual execution for any building or fighting. That's important when you need something built—anything—they build it all. For the most part, SOCOM teams run the same way—if you work well with the senior NCOs of that unit, you'll have success tied to theirs. JTACs work directly with the team leaders; they want to know who has the direct line (communications) to fires.

We're an Army Guard Aviation unit stationed on a Naval air station [NAS]. The NAS is part of a joint base with the Air Force in charge of the whole show. We're joint in organization naturally (the Guard is a joint USA/USAF team), but this is pretty extreme. If you don't—or won't—work well with others, you're in for a short-lived career. Know your role; complete your mission within your boss' intent. But know this: If you work well with others, you'll be given the opportunity to exploit their resources to help you. They'll do the same for your organization, so it's a win-win. And get used to it. The joint fight is here to stay.

Olivia Nunn
HHT, 1 BCT, 1 CD

I was an HHT commander for the brigade headquarters, which included State Department, Air Force and media embeds. Most of the State Department representatives worked on one of the three PRTs that were in our BCT's [brigade combat team] operational environment.

I treated the lead member or OIC [officer in charge] as a full member of my company team. I ensured that they received all email updates, requests for information and property-book-accountability tasks from me. I spent an hour with each of them, getting to know them and finding out what their expectations of the unit were.

I laid out the same rules of engagement to them as I did for any of my platoon sergeants. I did 10 percent cyclic inventories with them. I had them at the weekly training meetings. I also ensured they understood the request-for-movement procedures. I made it clear that they would be treated as equal members of the team and that they were required to follow the same rules as those given to the troops. They were not to be given special privileges and were not allowed to request or demand special treatment.

This went rather well, and I developed a great relationship with the team members. Most seemed happy to comply and were willing to work and make requests for assistance within the system. The key is getting their leader in on your plan; in turn, they get their personnel onto the same sheet of music.

Paul Maxwell
M/3/2 ACR

My battalion was attached to two different Marine regimental combat teams over the course of 15 months in Anbar Province. My recommendations are the following.

First, realize they have a different mind-set and different lingo from yours. As quickly as possible, pick up their vernacular and try to learn how they train and fight. The organization of these units is very different from that of the Army, and their tactical procedures are geared towards their service's requirements and equipment.

Second, you should brief the gaining unit on your capabilities and limitations as soon as possible. Talk about what you bring to the fight, what logistics requirements you have, etc. They are only vaguely familiar with your TO&E [table of organization and equipment] and its capabilities. You must help them to understand your unit so it can be employed efficiently. For example, most Marine Corps infantry battalions deploy only with rucksacks, duffle bags and small arms. They do not understand why it takes 85 HETs [heavy equipment transporters], 150 HEMTTs [heavy expanded mobility tactical trucks] and 100 milvans [military-owned demountable containers] to move a combined arms battalion.

Lastly, understand that they are a very flexible organization that cross-attaches units frequently. Squads, platoons and companies are interchangeable and move to where they are needed. The Army tends to be a little more resistant to making short-term, frequent cross-attachments. There is obviously much more to discuss, but this is enough to get the relationship rolling.

CPT Paul Maxwell, attached to Marine combat teams during a deployment in Iraq's Anbar Province, found that learning their vernacular and briefing them on his strengths and limitations early on helped forge a successful relationship.

Nick Nethery
722nd EOD

Just a bit of advice from years working with civilian law enforcement and my current mission supporting the State Department: I've had nothing but great experiences with both.

When working with nonmilitary agencies, check the order assigning you the mission to determine if DIRLAUTH [direct liaison authorized] is granted. It helps quite a bit to go direct for coordination, but if it isn't in the order you can raise hackles with green-suiter bosses who view direct liaison as "going around them." It might seem like common sense to go talk to this or that civilian, but if no direct communication without the boss's permission has been granted, it is best to secure that first.

You may be working with young, idealistic naive civil servants who don't understand that there is a cold, harsh world out there looking to kill them. For some of them, *you* are part of the problem, with your "Neanderthal" warrior ethos and your fascistic devotion to martial spirit. Try to be patient with these types. They are very few, but they are there.

Maintain your professionalism: You might be the first (or only) Army Soldier these people ever work with, so your impression on them will color their perception of our profession as long as they live.

Figure in an extra 25 percent or so on your timeline to complete tasks or execute missions—not because you or they are inefficient but because you speak different languages, have a different set of regulations, and your parent units (organizations) often have to call and hash out MOUs/MOAs with each other before you can proceed. As time goes by, it will get better as you get used to each other (and as you trust each other more), but at first it will be frustrating. Just be patient and try to give it time.

Jonathan Freeman
HHD, CJIATF-435

I am the headquarters commander at a three-star command in Afghanistan that is a Combined Joint Interagency Task Force. So I need to get along not only with other services but also with civilians from many agencies.

Here is what you can expect: No one is going to understand anything about property accountability. I have lost a lot of hair over trying to explain that even though we are deployed, the Army has paid for all the equipment and the Army wants to keep track of it. You can explain it all day, but unless they have previously been deployed with the Army, *they will not get it!*

Be very, very prepared to manage expectations. The number of times I have needed to explain to civilians or members of the Air Force that we are in Afghanistan and I cannot run down to Home Depot to get a toilet seat … Well, you get the idea.

In addition, if you have a large civilian contingent you will need to work out how to handle them. Even many that have prior military service will still be in a civilian mind-set and will have different security concerns and a lack of regard for personnel accountability. You are the commander; it is your responsibility to work through and manage those relationships. Do not think that you can command these people, but you will need to figure out a way to work with them.

By and large, though, this is like any other situation in the Army—if you have great NCOs it will all work out.

Jeremy Jones
Past PL, 983rd EN BN

During both of my deployments, I have worked closely with Marines and foreign militaries. I now work for the headquarters of U.S. Army Europe, where I work in an office where I am the only uniformed Army person and my frequent TDY travel has me working with multiple foreign militaries and governments. I say this to set up my two comments for this discussion.

Be friendly and nice to the people you're partnered with. Try hard to form positive relationships from the first time you interact with them; a smile and good conversation will go a long way towards transforming a shaky work relation-

ship into a strong partnership. Try to get to know the other element's leadership on a personal level.

Be competent. You can be the friendliest guy in the world, but if you can't do your job then you won't be a welcomed partner.

Ari Martyn
B/1-68 AR

I've been on both ends of this relationship, first as the "attachment" and then later as a commander who received attachments. Fortunately, I learned a lot from my first experiences. Here are some key takeaways and how I used these lessons when I took command.

■ No matter what, the attachment will always feel a bit unwanted. Even with the best of intentions, this cannot be wholly prevented. For administrative issues, for example, the "attached" will have a harder time than his peers reaching back to his parent unit. Civilians, moreover, will always have issues because their organizations were not designed to operate in decentralized combat zones. Knowing this, I instructed my 1SG to always pay special attention to our attached units and personnel. When issues like midtour leave came up, we had no assigned responsibility towards our attached personnel, but knowing how sometimes out of sight means out of mind, I had my 1SG track our attachments' personnel and admin issues. That way, if we needed to step in or help them out, we could.

■ As a PL [platoon leader] on my second deployment, I saw firsthand how well-rehearsed SOPs between nonorganic units and all sorts of different flavors of attachments directly saved lives. So, when in command, the first thing that happened with any of my attachments was that the 1SG or I would ensure that they were trained and validated on our SOPs; likewise we learned from them anything that they needed us to know. When it came to standards, they met my company's. In my unit, for example, you wore eye protection [eyepro] on missions—period. So, when we got an attached Army team that didn't have any eyepro, we gave him some. He appreciated this because he knew it was in his best interest. His parent organization didn't have this standard, but we did. There was only one time that we had an attachment complain about our standards and not want to meet them. We put him right back on the next thing smoking to the main FOB (after my 1SG gave his CSM a heads up and I had spoken to my S3). For civilian counterparts especially, I've never run into one who didn't defer to my judgment when it came to combat operations and personal safety.

■ All of these "non-Army" personnel got my personal attention. No matter their rank (or lack of rank), I would be sure to frequently check on them. I made sure that their living conditions were at least equal to what my Soldiers were living in, that they were being enabled to execute their part of the missions, and found out what issues they were having. This did two things. One, it made them feel like they were important and relevant; everyone loves getting face time with "the commander." (Likewise they were almost universally invited to any meeting or planning we were conducting, regardless of rank.) And second, I set the example for my company that just because you think that a USDA grain-growing expert is not as much of a warrior as you who enlisted to be a machine-gunner, it doesn't matter. He is a good American trying to do his part for the war, and we will treat him as such.

The bottom line is that whether civilian, Air Force, paratrooper or finance clerk, everyone wants to serve with the best possible unit and have the baddest, meanest, scariest and safest guys on their left and right when they leave the wire, regardless of their mission. If your attachments think of you in those terms, then you'll find that they will be willing to work with you. Moreover, word will get around and you'll have people requesting to work with your unit, and you'll get your choice. Meanwhile, your boss will be happy with the good work you are doing and the great feedback he is hearing from his State Department counterpart, for example, and you will start getting more of the toughest, most rewarding missions. All this will lead to the most important benefit: having a greater effect in your area of operations, which is the point of "combat enablers" in the first place. If, however, your attached partners feel that they are wasting their time or they are being unnecessarily endangered by you and your unit, or if you are forgetting about them, then it will be a long deployment. So, bottom line, be competent, be positive and take care of them as well as you would take care of your own troops, and success will surely follow.

When we engage in conversation about growing and leading combat-ready teams, we become more effective leaders. If you are a currently commissioned officer who is passionate about company-level leadership, log in to your forum at http://CC.army.mil. Want to provide feedback? Write the CC team at cocmd.team@us.army.mil.

AUSA Sustaining Member Profile

KEYper Systems® (Key Control)

Corporate Structure—President and CEO: Robert (Bob) Conder. U.S. Headquarters: 5679 Harrisburg Industrial Park Drive, Harrisburg, N.C. 28075. Telephone: 800-399-7888. Web site: www.keypersystems.com.

KEYper Systems began designing and manufacturing patented mechanical key control systems in 1991. Immediately these products drastically improved accountability, efficiency, cost containment and overall security through key control. The first systems used a basic mechanical design and held users accountable by recording who had all of the keys all of the time. This simple and affordable system was wildly successful and is now in use in thousands of industries in which key management is an arduous task.

The initial products produced by KEYper Systems were revolutionary and are still extremely popular today. The year 2003 marked a momentous change for the company, when it expanded its product line to include robust electronic key-control systems and electromechanical after-hours key control as well as asset-control systems driven by proprietary software and biometric authentication. These systems are now in use in a multitude of military and governmental installations, from the U.S. Embassy in Iraq to the U.S. Coast Guard facility at Hilo, Hawaii, as well as many locations and industries in between.

The KEYper Systems global headquarters is located just north of Charlotte, N.C., in Harrisburg. All product development, engineering, manufacture, quality control, sales and support of KEYper Systems products take place there. Many customers take advantage of the location to meet the staff and ensure that their system specifications are fine-tuned in person. The company openly welcomes customers for plant tours and product demonstrations.

The number-one focus at KEYper Systems is customer service and support. Understanding that customer service must be an attitude, not just a department, has enabled KEYper Systems to not only win new customers but also maintain long-standing relationships with them for years to come. The challenge is to meld old-school customer service philosophy with new-world technology. KEYper Systems employees pride themselves in being hands-on and actually talking to the client or end user when possible and using any means necessary to respond to the customer. One example is the use of remote access to view, train and troubleshoot its automated systems anywhere in the world.

Adding to the allure of the KEYper Systems product line is the use of cutting-edge technologies. Recent product introductions use touch-screen interfaces, hardware innovations and proprietary software that produce automated reports in the form of emails and text messages. This proprietary software was developed over 20 years of direct field research and feedback. All of these technologies serve to increase the effectiveness and user-friendliness of the systems. Users of any technological comfort level can effectively use a KEYper Systems product.

The company began an extremely rewarding and mutually beneficial relationship with the Army (and the U.S. government in general) when meeting with officials from Fort Campbell, Ky., at a military housing trade show. This meeting precipitated a great relationship that continues today and introduced KEYper Systems to the key-control needs of the military in housing, equipment management and security throughout installations. Since that show, KEYper Systems has attended many related events such as those hosted by AUSA and ASIS International as well as many more "local" military and law-enforcement trade shows. KEYper Systems is proud to state that it has systems in almost every level of government including the Department of Defense, all branches of military service including all reserve components, all levels of Department of Homeland Security and others.

KEYper Systems is proudly veteran-owned. Many of the engineering product development and manufacturing staff are also veterans. They now maintain a separate department strictly to support and maintain government sales in-house. All governmental sales are handled directly through the corporate office to ensure the best in price and communications. By doing so, lead times are reduced and can best fit the product to a customer's needs. KEYper Systems knows that true customer satisfaction can only be derived by listening to the customer and providing the right product to fit that customer's needs.

KEYper Systems is honored to be a sustaining member of AUSA, and it appreciates the opportunity to support U.S. soldiers worldwide with its products, services and efforts. It welcomes inquiries and product development ideas to better help the members of the U.S. armed forces.

Soldier Armed

M1117 ASV/MSFV Update

By Scott R. Gourley

With more than 3,000 units in U.S. Army inventories, the combat proven M1117 Armored Security Vehicle (ASV) used by the U.S. Army Military Police (MP) Corps and the associated M1200 Knight used by Field Artillery observation teams have made significant contributions to combat operations in Iraq and Afghanistan over the past decade.

Activities surrounding the vehicle family continue to expand in 2012, with the recent go-ahead for the industry reset of returning combat platforms as well as the fielding of three new related vehicle variants that will serve as elements to the success of U.S. withdrawal strategies from Afghanistan.

The base M1117 ASV is a 4-by-4 wheeled armored vehicle that offers exceptional crew protection through the employment of multiple layers of armor that provide defense against medium-caliber, armor-piercing machine-gun fire, large artillery projectile fragments and land mines. The use of an all-wheel independent suspension system provides the ASV with superior mobility, agility, handling and ride quality, while a Textron Cadillac Gage dual-weapon 40 mm/.50-caliber turret on the Army's MP version enables all ammunition reload to be performed under armor and allows the crew to remain protected from enemy fire.

Speaking at a recent industry conference, COL William Boruff, U.S. Army project manager for Joint Combat Support Systems, pointed to a U.S. Army fleet portfolio consisting of approximately 2,900 M1117 ASVs and approximately 465 M1200 Knights.

Describing the ASV as "the mainstay for the MP corps," COL Boruff pointed to a projected completion of production activities in the fiscal year (FY) 2013 time frame as well as ongoing reset activities.

Reset Activities

A significant recent program milestone involves the mid-October 2011 award to Textron Marine & Land Systems, an operating unit of Textron Systems, of a competitive contract by the U.S. Army Tank-automotive and Armaments Command (TACOM) to reset several hundred ASVs returning from theater.

Industry reset activities serve to complement parallel reset efforts under way at Red River Army Depot, Texas. In fact, in 2008, Textron Marine & Land Systems, in collaboration with Red River Army Depot, executed a six-vehicle ASV reset pilot program for TACOM, followed two years later by Textron's refurbishment of an additional 12 ASVs.

Although the award of the October 2011 industry reset contract to Textron was subsequently protested to the U.S. Government Accountability Office, that protest was denied in early January, allowing the industry work to begin.

According to Richard Valenti, vice president, business development and capture management at Textron Marine & Land Systems, the reset contract requirements call for "bringing the vehicles up to fully mission capable status—what the Army calls a -10/-20 reset."

"That includes a lot of preventive maintenance checks, oil changes and things like that," he explained. "There is also a list of mandatory replacement parts: those things that, between Textron on the prototype and pilot programs, along with TACOM and their experience, have identified on the vehicle as things that should be replaced. For instance, experience has shown that we should replace all four tires on every vehicle that comes in.

"So that's part of the mandatory replacement list. We are also replacing those things that are typically damaged by what the Army calls Three-D—delayed desert damage. Those are things like hoses and rubber parts that are typically damaged in a desert environment."

In addition to the mandatory replacement parts, the reset program also tasks Textron with performing a complete inspection of each vehicle and identifying any needed work that goes above and beyond the standard full mission capable -10/-20 reset.

"That's called IROAN work—inspect and repair only as necessary," Valenti offered. "That element in the contract allows us to get funding for both labor and material as we identify those things that need to be replaced or repaired. Typically those things might include components that are damaged or missing [including armor

U.S. Army/SPC Anita VanderMolen

Soldiers from the 41st Infantry Brigade Combat Team prepare Caiman MRAP vehicles and M1117 Guardian armored security vehicles for a convoy security mission in Iraq in 2009.

Textron Marine & Land Systems

The Mobile Strike Force Vehicle (MSFV) with Gunner's Protective Kit is a modified and updated version of a Textron Machine & Land Systems vehicle platform design, and allows for additional protection while still utilizing commercial off-the-shelf parts.

and structural damage and] would be covered by IROAN work. Each inspection gets reviewed by the government and approved prior to us doing any of the identified work."

Vehicle quantities identified in the reset contract include a base year of 392 vehicles, an option for 225 vehicles in year two and an option for 167 vehicles in year three.

"We deliver the vehicles back to the government here on site, and through the government transportation system they are then shipped to their fielding sites," Valenti explained. "The government has a fielding plan to issue these to units that have a requirement for ASVs, and we are working … to make sure that the production schedule for reset fits well with fielding plans for those units, and those include a lot of National Guard units as well as active Army military police units."

COL Boruff noted that the majority of reset activities at Red River Army Depot and Textron will take place in calendar year 2013, adding that discussions were still under way at the Program Executive Office level concerning possible program management transition following completion of current production and reset activities.

Mobile Strike Force Vehicle

In addition to its numerous tactical contributions, the ASV is also making a significant strategic contribution by serving as the design foundation for the new Mobile Strike Force Vehicle (MSFV) that the U.S. Army started fielding to the Afghan national army (ANA) in February.

The MSFV is being provided in three variants: equipped with the standard 40 mm/.50-caliber machine-gun turret, an objective gunner protection kit (OGPK) and a raised hull ambulance configuration.

According to COL Boruff, current plans call for building 352 of the turreted variant, 142 of the OGPK variant and 23 ambulance variants.

"This is the Afghan army's armor of the future," he explained. "This is what NATO has decided to give them. They will build around five battalion task forces with about 58 of these vehicles in each task force, along with about 72 other wheeled vehicles."

COL Boruff characterized the platform as "providing an optimum design for armored wheeled vehicles for the ANA." He added, "It is the most efficient and effective combination for mobility, protection, survivability and firepower."

"We basically leveraged all of the history of the ASV program and how it was designed for the ANA," said Mike Gelpi, vice president, land systems and life cycle support at Textron Marine & Land Systems. "But in terms of differences, the [MSFV] vehicle was 'stretched' by approximately two feet right behind the front fender well. That may not sound like much, but it really opens up the entire interior volume and allows additional spots for crew."

Noting that the current M1117 design only has places for three individuals, he added that the stretched MSFV with the OGPK has a 10-person capacity (eight crew, driver and commander); the 40 mm/.50-caliber turret

U.S. Army

The first Afghanistan national army MSFVs arrive in Afghanistan for deprocessing. The U.S. Army began fielding the MSFV to the Afghan national army in February.

Armored vehicles move onto Forward Operating Base Shank, Afghanistan, as part of a convoy that carried soldiers from 10th Mountain Division's 3rd Brigade Combat Team to the base from Bagram Airfield.

MSFV has seven-person capacity (four crew, one person in the turret, driver and commander). The new ambulance configuration with a "higher roof" allows for litter transport.

Although the initial vehicles had been scheduled for arrival in Afghanistan in mid-January, a series of transportation and logistics difficulties delayed the arrival of the first six vehicles until February. Ongoing delivery should permit the planned fielding of the first *kandak* (battalion) around the end of March.

Enhanced Survivability

"In addition to the differences in size and stretch, one of the bigger issues involving improvements of the M1117 is on the survivability side," Gelpi said. "The ballistic protection [on MSFV] is the same as on the M1117, which is greater than that of MRAP vehicles, but now the mine-blast-survival capability on the ANA [MSFV] vehicles is the same as on MRAPs, and that is significantly more than [what] was on the M1117."

One important aspect of the MSFV enhanced survivability package involves raising the vehicle higher off the ground. Specific design improvements to the survivability goal include the use of slightly larger HEMTT [Heavy Expanded Mobility Tactical Truck] tires along with a different axle design. Taken together, the suspension features result in raising the vehicle by approximately 8 inches higher than the M1117.

"There are other changes on the interior, related to occupant safety, that help with survivability," Gelpi said.

Asked whether the U.S. Army might be examining some of the survivability enhancements as a potential future upgrade to the M1117, he acknowledged that the military police community—service proponent for the ASV—has updated the system's capabilities documentation to reflect the higher level survivability package as a desire for future fleet modernization. In an industry briefing, COL Boruff noted recent modernization communications between his office and representatives with the Assistant Secretary of the Army for Acquisition, Logistics and Technology.

Paraphrasing this communication, he said, "Modernization of the ASV platform to meet the MP warfighter role of today—the Maneuver Center of Excellence, U.S. Army Military Police School and PM [product manager] ASV align to provide a modernized ASV platform to meet the MP warfighter [requirements] of the future."

"The ASV is going to be part of Army inventory until about 2025," he said. "That's a long time out there. … ASV modernization is the MP school's number-one priority, so that will get a lot of emphasis, [and] we'll be able to work on that."

Acknowledging general industry concern about reduced funding in future Department of Defense budgets, COL Boruff told the audience, "We are going to do our best to maintain the platforms that we are going to have out there to 2025. We are going to look at recapitalization programs [and] reset programs because we have to be able to keep what we have in the fleet out there and running.

"What we are going to look at for the recap[italization] is increased survivability by upgrading the ASV protection level to a minimum of MRAP level I; upgrading the target acquisition for the turret; and meeting all the key performance parameters like net ready, transportability, lethality and mobility."

While the service has interest in expanding system survivability, Textron's Gelpi also sought to clarify the "misconception" that ASV does not have a V-bottom hull design.

"ASV M1117 does have a V-bottom and has done unbelievably well in all of its years of combat from a survivability standpoint," he said, "but we think that if it's good enough for the Afghan soldiers to have MRAP-level mine-blast protection, it should also be good enough for U.S. soldiers. So we strongly advocate and support the eventual retrofit of the enhanced survivability improvements to the M1117."

Characterizing the new MSFV as "a lot more than just a vehicle program," Gelpi noted the contract inclusion of "a lot of services for training the Afghan national army to operate and maintain the vehicle."

"The whole MSFV/ANA program is integral to the U.S. strategy in Afghanistan," he summarized. "As you might imagine, it is also integral to the U.S. exit strategy and trying to withdraw from that country, and part of that is to essentially teach guys who have never even driven vehicles how to operate and maintain a 15-ton combat vehicle. It is a challenge and a tall order, but we have a whole team of people in Afghanistan who are just beginning this training program for the Afghan national army." ★

AUSA's Institute of Land Warfare invites you to

GIVE VOICE TO YOUR KNOWLEDGE

The Association of the United States Army's professional education program is designed to identify, discuss and influence the outcome of significant issues that affect the U.S. Army and national defense. AUSA's Institute of Land Warfare (ILW) accomplishes this goal through the sponsorship of writing programs, for which quality manuscripts are needed.

ILW would like to invite you—past and present servicemembers, Army civilians, friends of the Army and others with an interest in and knowledge of national defense—to submit a manuscript to one or more of our writing programs. Membership in AUSA, while always encouraged, is not a requirement for participation.

CALL *for* MANUSCRIPTS

For important information on the Institute of Land Warfare writing program categories and submission guidelines, please visit http://www.ausa.org/publications/ilw/Pages/WritingProgram.aspx.

Reviews

The Human Experience of War

Inferno: The World at War, 1939–1945. *Max Hastings. Random House. 729 pages; black-and-white photographs; maps; notes; index; $35.*

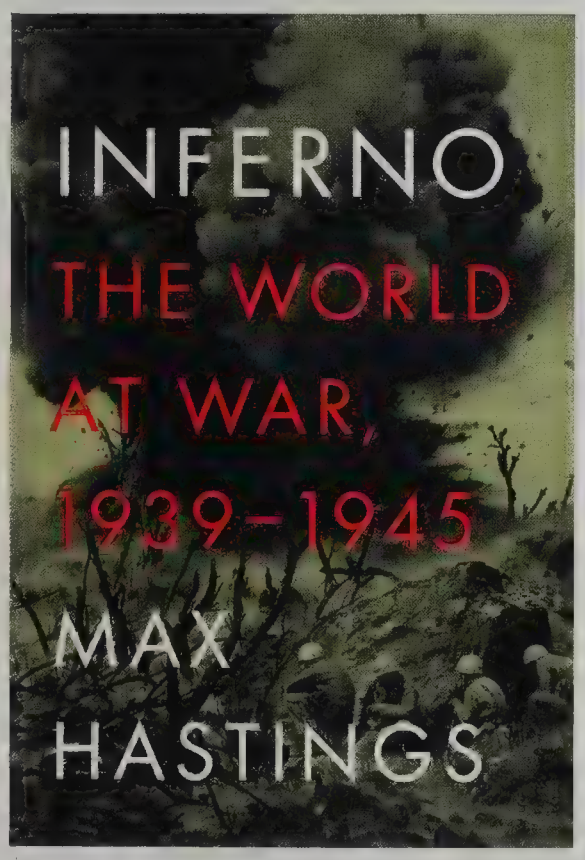
By COL Stanley L. Falk
U.S. Army retired

World War II has been over for nearly 67 years, yet interest in the great conflict is still as strong as ever. New books, from small battle studies to large overall accounts, continue to appear and flourish. One of the latter, and certainly one of the best, is Max Hastings' *Inferno: The World at War, 1939–1945*, an in-depth examination of the human side of the war.

Max Hastings is a British journalist, editor and war correspondent. The author of more than 20 books, half of which cover aspects of World War II, he synthesizes and caps his earlier works in this volume. *Inferno* is a spellbinding and beautifully written summary, analysis and unflinching description of the horrendous personal impact of that great struggle.

This book, as he states, is "chiefly about human experience." It focuses on the fears, struggles and trials of those millions of ordinary people—both soldiers and civilians—whose everyday lives were rudely interrupted by the harsh impact of total war. Men, women and children all faced "ordeals that in many cases lasted for years, and for at least 60 million were terminated by death." Hastings graphically describes atrocities on both sides, especially during the savage fighting in the final stages of the war in Eastern Europe.

Inferno thus differs markedly from other fine volumes on World War II such as John Keegan's *The Second World War*, with its emphasis on strategy, operations and military leaders; Gerhard Weinberg's *A World at Arms: A Global History of World War II*, which covers the major high-level aspects of the war; Andrew Roberts' *The Storm of War: A New History of the Second World War*, which focuses on the German side of the war; and other works that analyze strategy and tactics or key decision making. Hastings' long, sweeping panorama covers most events of World War II but concentrates on those ordinary individuals whose specific experiences are often overlooked in more general studies.



The book is by no means a complete history of the war. The author has already covered many aspects of it in his earlier works, notably *Overlord: D-Day & the Battle for Normandy; Bomber Command; Armageddon: The Battle for Germany, 1944–1945*; and *Retribution: The Battle for Japan, 1944–45*. So he avoids repeating material that he has previously related in detail. Thus while *Inferno* describes in general terms the major military campaigns of the war and often, in some detail, the harsh combat, its focus on individual experiences and recollections gives it an episodic, almost impressionistic appearance.

The striking feature of the book is its use of hundreds of vivid personal testimonies to brilliantly illustrate its theme. The opening pages describe the enthusiasm of a young Polish fighter pilot in the first days of war: "We wanted to fight, it excited us, and we … didn't believe that something bad could really happen." A euphoric young German expressed this "wonderful feeling" to be marching into Poland, but then, as German bombs killed women and children, a nurse saw a "procession of wounded, … an unending march of death," and a senior British observer wrote bitterly that "I saw the very face of war change—its glory shorn … women and children being buried."

Less than a year later, a British soldier, fearing public scorn or worse after his evacuation from Dunkirk, was surprised to be greeted by "people cheering and clapping [for] us as if we were heroes." Then a British teenager, trapped in Paris, likened the German entry to a "gigantic green snake that wound itself around the heart of the broken city, which waited pathetically to be swallowed up."

It was the fierce struggle for eastern Europe, after Germany invaded the Soviet Union, that exacted the greatest toll on both soldiers and civilians. The two-year Siege of Leningrad alone saw probably a million deaths. Most of these came under German shelling and bombing, but tens of thousands of citizens died of starvation. Bread rations were severely limited; some people ate grass cakes. "The greatest horror," wrote one woman, was "where to get something edible. … Life [had] been reduced to one thing—the hunt for food." Corpses lined the streets. In the sub-zero winter temperature, one man thawed another's frozen legs to remove his boots. Altogether the siege "cost its defenders and citizens more lives than Britain and America together lost in the entire war."

Indeed, in the first year of fighting in Russia alone almost 3 million Russian and a million German soldiers were killed, a toll that increased almost exponentially as the war went on. The huge number of Russian civilian deaths is almost incalculable. Starvation, German artillery and shocking atrocities took the lives of countless men, women and children. Children's deaths were the most shocking. "We understand the horrors of war," wrote a Russian officer. "But children, these blossoms of life … these innocent holy souls … We've failed to protect them … One's thoughts freeze with horror at the sight of small bloodsoaked bodies, with gnarled fingers and distorted little faces."

Such personal testimonies appear on almost every page of Hastings' account. They lend authenticity and immediacy to his powerful narrative. The text is further enriched by the frequent inclusion of statistical information: troop strengths, casualties, distances, speeds of advance and retreat, shipping losses, public opinion polls, and other informative material.

Hastings also doesn't hesitate to state his strong opinions on important subjects. Germany, he writes, "made war very badly," but the German army fought "brilliantly." Yet it was too willing to accept Hitler and the "murderous adventure" into which he committed the *Wehrmacht*. Both Germany and Japan "made strategy with awesome incompetence," but their soldiers displayed "high courage and tactical skills." The Japanese military nevertheless had a deep "cultural incapacity" to consider what the enemy might do.

Both Hitler and Stalin cost their armies hundreds of thousands of lives by forbidding them to yield even an inch of ground. Yet, Stalin managed to overcome his "limitations as a military commander" and eventually created "an extraordinary military machine." Its victories, however, were won at "a human cost no democracy would have accepted." It was also a "barbarous army," as indeed was the brutal Japanese soldiery.

Hastings writes that Winston Churchill saved Britain in 1940 and was wise to support the Soviet Union. The prime minister was also correct in insisting on invading North Africa, but he erred in his other strategic ideas, and the performance of the British army itself throughout the war was "unsatisfactory." Field Marshal Sir Bernard Law Montgomery was a "highly competent professional" who deserves "significant credit" for the successful Allied invasion of France. Yet he "never achieved a masterstroke."

President Roosevelt rallied the American people after Pearl Harbor and was wise to support Britain and Russia, but might not have actually led the country into war had the Axis not forced him to do so.

GEN George C. Marshall "showed greatness as a statesman as well as a warlord." Then-GEN Dwight D. Eisenhower was not an outstanding strategist or tactician but "achieved greatness by his diplomatic management of the Anglo-American alliance in the field." GEN Douglas MacArthur was "distinguished by the splendor of his self-image … rather than by gifts as a battlefield commander."

A number of Russian generals were commanders "of the highest gifts." Gen. Tomoyuki Yamashita was Japan's "ablest ground-force commander." Japanese admirals "displayed astonishing timidity," and Adm. Isoroku Yamamoto, while initially very successful, was largely to blame for the navy's later defeats.

The Potsdam Declaration, concludes Hastings, was not sufficiently specific as an ultimatum, yet Japan itself was responsible for the atomic destruction of Hiroshima and Nagasaki.

Inferno is an original, thoughtful, perceptive and very readable account. It offers a view of the war both fascinating and disturbing, and captures the essence of that great cataclysmic struggle.

***COL Stanley L. Falk**, USA Ret., Ph.D., is a military historian and author specializing in World War II.*

The Complexities of Ending War

Between War and Peace: How America Ends Its Wars. *COL Matthew Moten, editor. The Free Press. 371 pages; maps; index; $17.*

By LTC Jon Scott Logel
U.S. Army retired

A quarter century ago, Charles E. Heller and William A. Stofft published *America's First Battles, 1776–1965*, a collection of essays by leading military historians that focused on how the U.S. military transitioned from peace to war. Commissioned by GEN Donn Starry while he was the commander of U.S. Army Training and Doctrine Command (TRADOC), that book was to help the "Army's officer corps … anticipate the nature and evolution of future conflicts." A staple of military education and officer development, *America's First Battles* subscribes to the idea that if American leaders study past wars, they can achieve a better victory in the next.

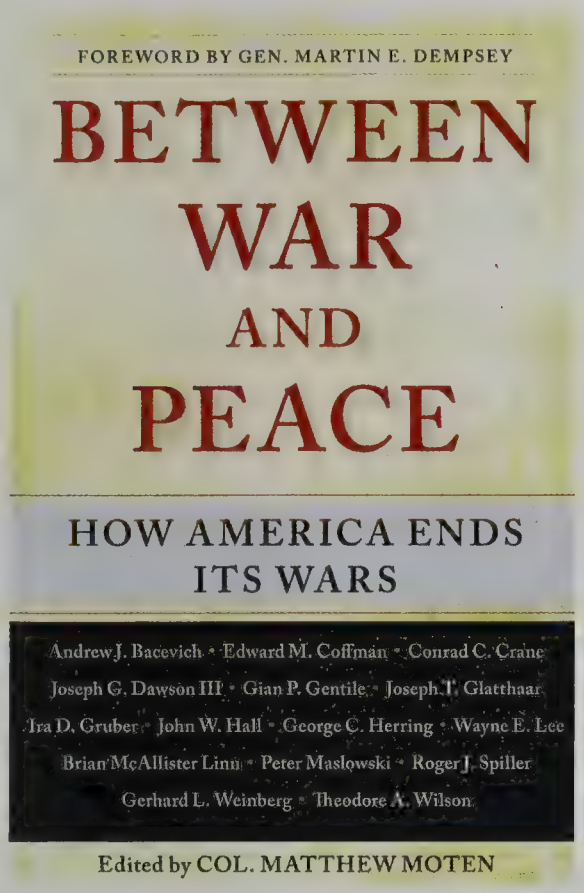
Now, as the nation hopes to end a decade of war, COL Matthew Moten has led the effort to follow *America's First Battles* with *Between War and Peace: How America Ends Its Wars*, a similar collection of essays written by today's most prominent military historians. This time, however, the authors focus on the transition from war to peace.

In 2009, GEN Martin E. Dempsey, as commander of TRADOC, asked COL Moten to lead a collaborative study of "war termination in American history." COL Moten writes that the endings to American conflicts "have brought about unforeseen and unwanted consequences; the aftermath has seldom resembled the peaceful future the nation's leaders had imagined and hoped for when they first decided for war."

The book's 15 essayists explore a timeless problem that is arguably "more complex than war itself." From

the Battle of Yorktown through the end of Desert Storm in 1991, the authors systematically analyze the trajectory of America's wars by examining the origins, evolving political aims, changing strategic objectives, war termination and the implications of the peace that followed. *Between War and Peace* is a study of policy and strategy that seeks to inform not only the military leader but also the civilian leadership, who ultimately must decide between waging war and making peace.

Roger J. Spiller's first essay sets the book's tone by making six general propositions about the American perspective of war termination. Noting that these propositions may appear "counterintuitive" at first, Spiller invites readers to question the idea of a decisive campaign and to consider more carefully how in "war the aims of all sides ... gradually converge toward an agreement to stop fighting." Instead of just focusing on how one side compels the other to do its will, as Clausewitz describes, Spiller and the other authors thoughtfully consider the aims of all sides as the belligerents reach war's end.



Between War and Peace explores the convergence of adversarial war aims across the continuum of American military history. By framing their analyses with familiar wars and events, the authors help us understand the complexities of war termination. For example, Ira D. Gruber's chapter on the end of the American Revolutionary War recounts the well-known events that transpired between Yorktown and the Treaty of Paris, and then considers how those terms failed to resolve American security interests on the western frontier and the Atlantic Ocean.

In his chapter on the War of 1812, Wayne E. Lee argues that the Battles of Plattsburgh were decisive in ending the war for Britain; the United States, however, pursued a "fortress America" postwar strategy based upon the burning of Washington, D.C., and the defense of Baltimore, Md. With both of these early wars, the authors make the case that U.S. postwar policy was misguided in light of the threats and conflicts that came next.

Two chapters focus on the conflict between the U.S. Army and Native Americans. John W. Hall's essay on the Seminole Wars highlights how the U.S.

ARCIC/AUSA
WRITING CONTEST

The Army Capabilities Integration Center (ARCIC) is seeking to identify, discuss and influence the outcome of significant defense issues that affect the U.S. Army. To allow for more direct participation in the public debate of defense-related issues, ARCIC and AUSA are once again co-sponsoring a writing contest. The submission of quality manuscripts is encouraged.

Contest participants may choose from three themes:

- The Network as a Weapon and Mission Command;
- Asia-Pacific and the Middle East; and
- Special Operations Forces and General Purpose Forces Integration.

Papers must be original, unpublished and between 5,000 and 10,000 words, with a one-page synopsis and a brief biography of the author. The deadline for submission is 31 May 2012. A cash prize* of $1,000 will be paid to the winner, and all papers will be submitted to AUSA's Institute of Land Warfare for possible publication.

** Essays submitted by individuals employed by/assigned to ARCIC and by individuals employed by AUSA national headquarters may be considered for publication by AUSA, but those individuals will not be eligible to receive the cash prize.*

The United States Army neither states nor implies any endorsement of AUSA, the Institute of Land Warfare or any other nonfederal entity participating in this event.

Paper Submissions

on disk only to:
ARCIC Initiatives Group
ATTN: D. Shunk
Room 4105B, Building 950
950 Jefferson Ave
Fort Eustis, VA 23604

or e-mailed to:
david.shunk@us.army.mil

For more information, visit www.arcic.army.mil

tends to prepare for the wars it wants to fight, not the ones it is more likely to encounter. Hall compares LT William T. Sherman's prediction of the Indian wars that would dominate much of the 19th century with the War Department's strategic choice to fortify the Atlantic seaboard. Peter Maslowski examines the Indian wars by framing them in the context of the 300-Years War, taking a longer view of the conflict that began with European contact in North America and continued through the 1890s. In a later chapter, Brian McAllister Linn highlights the connections between the Indian wars and the nation's conflict with guerrillas in the Philippines. Linn builds on Maslowski's observations by noting that American military leaders relearned tactics and practices first used on the western plains of the United States when it came to fighting the Philippine War at the turn of the 20th century.

In the chapters on conventional wars, which include the Mexican War (Joseph G. Dawson), the Civil War (Joseph T. Glatthaar), World Wars I and II (Edward M. Coffman, Theodore A. Wilson and Gerhard L. Weinberg) and the Korean War (Conrad C. Crane), readers will find well-known topics that illustrate the relationship between political concerns and strategic alternatives. Particularly rich are the passages on postwar occupations of Mexico City, the American South, Japan and Germany. Crane's chapter on air power in the Korean War is a concise summary of the allure and shortcomings of the aerial instrument in bringing an enemy to terms. Underscoring the importance of the political leadership in any war termination, George C. Herring's essay stresses the influence of Ronald Reagan's and Mikhail Gorbachev's leadership and judgment in ending the Cold War.

Perhaps the book's most provocative essays come at the end, with Gian P. Gentile's consideration of Vietnam and Andrew J. Bacevich's essay on Iraq. While *Between War and Peace* strives "to avoid analyzing the problems of the past through the lens of current concerns" in Iraq and Afghanistan, both of these essays deftly challenge that goal. Gentile's demand for "clearheaded thinking about policy and strategy that aligns ways, means, and ends relative to our national interests and the potential of our enemies" applies to 1964 as much as it does now. Bacevich goes further, arguing that the Persian Gulf War did not vanquish the ghosts of Vietnam, but rather was "a grotesque misunderstanding of the context from which the Persian Gulf War had emerged." Furthermore, he includes indictments of the leadership for failing to see the larger challenges presented by an Islamic Middle East.

Although *Between War and Peace* suffers slightly from the awkwardness of forcing so many perspectives into a common essay structure, it is, on balance, an excellent piece of policy and strategy literature. In addition, each essay stands on its own and can be incorporated into any study of military history or American policy-making. This volume is a must-read for strategic leaders, planners and those who strive to produce a better end to America's wars.

***LTC Jon Scott Logel**, USA Ret., Ph.D., a former assistant professor of history at the United States Military Academy and veteran of Afghanistan and Iraq, is an assistant professor of war gaming at the United States Naval War College.*

A Portrait of Leadership

All In: The Education of General David Petraeus. *Paula Broadwell with Vernon Loeb. The Penguin Press. 394 pages; index; appendices; black-and-white photographs; maps; $29.95.*

By LTC Edwin L. Kennedy Jr.
U.S. Army retired

GEN David Petraeus' last year in uniform found him commanding in Afghanistan at the behest of the White House. Paula Broadwell and Vernon Loeb have done an excellent job of following this challenging year that many hope has set the conditions not just for a successful withdrawal but also for longer-term stability for Afghanistan.

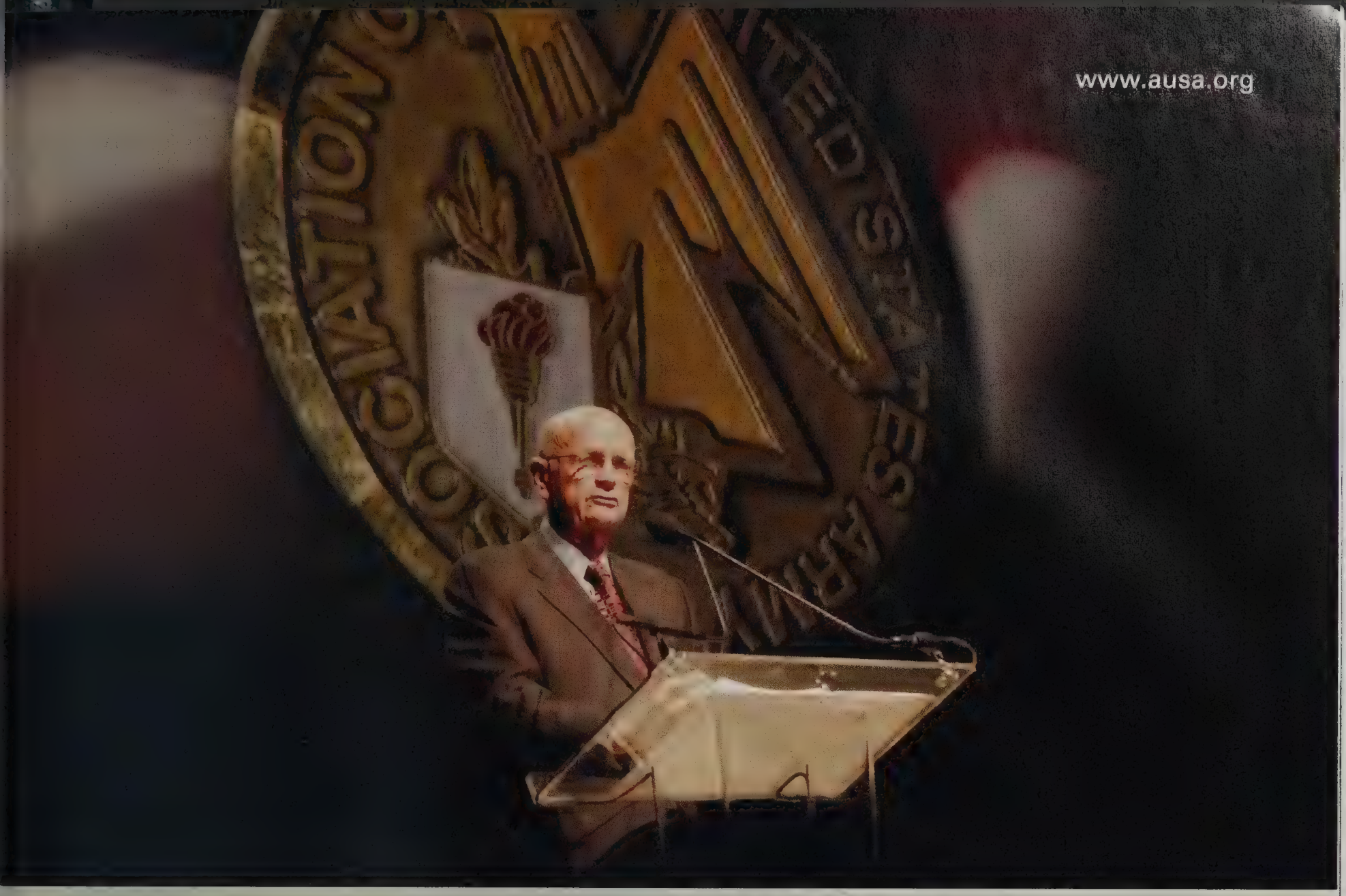
What strikes me most about *All In: The Education of General David Petraeus* is that it is not just about counterinsurgency (COIN), GEN Petraeus' hallmark. While COIN is seemingly a major focus of the narrative, the Petraeus the authors present is a man whose education and background are absolutely suited to his increasing leadership responsibilities. His assignments as aide-de-camp to several general officers contributed to that education and provided perspectives so necessary for his future development.

In addition, Petraeus' mentors, senior officers who took him under their wings, offered sage counsel and guidance. As a result, GEN Petraeus did the same for his subordinates, according to the Army mentoring system as it was conceived. Broadwell and Loeb cite Petraeus' interventions in Afghanistan on behalf of talented leaders he thought were being stymied by the bureaucracy. He took a particular interest in those who he thought "got it" concerning COIN, and he did what he could to advocate for them and assist their progress.

GEN Petraeus manages to exhibit extraordinary emotional intelligence under situations that would try even the most patient of people. His dealings with Afghan leaders who were not only resistant to change but also sometimes openly hostile to coalition strategies made for a stressful year.

He persevered, though, demonstrating not only extraordinary patience but also humility and a higher sense of duty.

Broadwell and Loeb consistently return to Petraeus' earlier educational experiences and link them to his command in Afghanistan. While he did not take the COIN electives, such as Revolutionary Warfare, as a cadet, he started



Over 650 of the world's leading defense companies are members of the AUSA Sustaining Membership Program. Is yours?

The Association of the United States Army's (AUSA) Sustaining Membership Program is your vital link to Army decision-makers at the highest levels. As the Army's professional organization, AUSA has played a role in strengthening national security for over 60 years by facilitating partnerships between military decision-makers and industry leaders.

When you join AUSA's Sustaining Membership Program, your company's executives will have the opportunity to share ideas with top Army officials at AUSA events. These events are conducted and attended by high level Army decision-makers, DoD officials and industry leaders – the individuals who are setting the agenda for the Army's future!

Join us today and discover what the AUSA Sustaining Membership Program can do for your business.

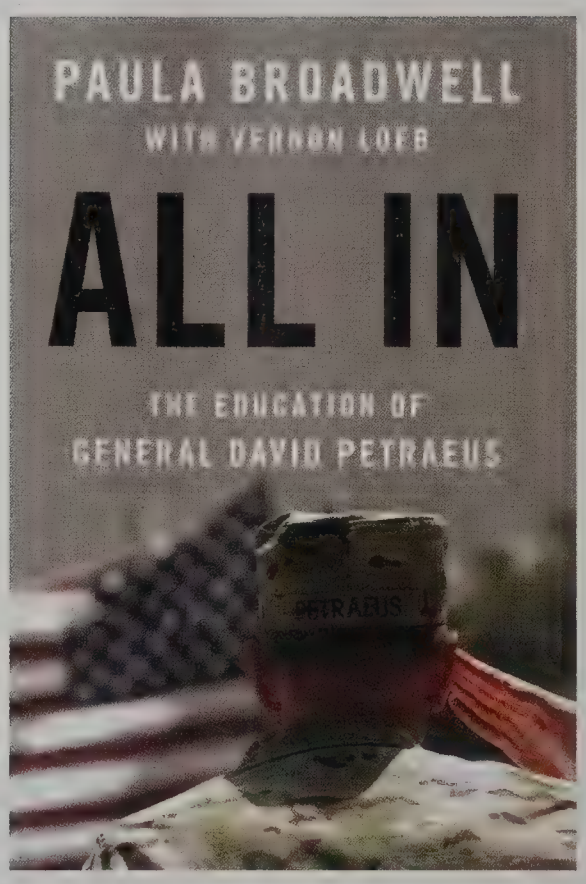
AUSA Sustaining Membership Program:
Supporting the Army–Industry Partnership

Association of the United States Army
2425 Wilson Boulevard • Arlington, VA 22201 • (703) 841-4300 ext. 2665 • www.ausa.org

thinking about counterinsurgency early in his career. By the late 1980s Petraeus had completed his doctorate, writing his dissertation on the experience of the United States in Vietnam.

He soon developed a deep and intellectual interest in U.S. counterinsurgency successes and failures. His published articles, however, and even his dissertation, are less about COIN than the application of military forces to solve conflicts with a post-Vietnam Army. The COIN doctrine that eventually became FM 3-24 was formulated during the 1990s from experiences and observations gained from Haiti, the Balkans and Central America. It is a synthesis of Petraeus' entire educational experience—not just a reaction to events in Operation Iraqi Freedom.

There are a number of other lessons GEN Petraeus culled from his personal experiences. He took them with him to Afghanistan in 2010, gaining a healthy respect for the power of the press and how it had to be reckoned with as a potentially positive force. His admonition to his subordinates was: "Be the first with the truth." His service in Haiti and Bosnia shaped an understanding of interagency utility in what we now call stability operations. This understanding translated into the multidimensional approach—lines of effort in Iraq and Afghanistan—and is now embodied in current COIN and stability operations doctrine. This doctrine was formalized in 2006 when the newest counterinsurgency manual and, subsequently, the stability operations manual, were published.



That GEN Petraeus' year in Afghanistan was tiring is palpable when reading this book. The authors' description of the constant efforts required to deal with the sometimes uncooperative and difficult Afghans made me feel the drag it must have had on GEN Petraeus. I believe, however, that their description is overly simplistic when they say that the greatest challenge was "the high maintenance required to keep the members marching together and ... staying in the formation." It is a tribute to GEN Petraeus that he was able to maneuver within the culture of corruption and other hurdles he constantly worked around, some of which were in his own government.

While Broadwell and Loeb have done a remarkable job of showing organizational and strategic leadership skills, I wish they had also showed the very personal leadership character of GEN Petraeus. They allude to it at the end of the book when they discuss the "mask of command." Although he has never made a big show of it, GEN Petraeus has personally intervened in soldiers' lives to help or encourage them in their struggles.

All In complements the Army's leadership doctrine by providing examples of how interpersonal relationships working across boundaries can make even seemingly insurmountable tasks doable. GEN Petraeus' talent at providing direction and inspiration are worthy of being studied and emulated at all levels of command. Kudos to Broadwell and Loeb.

***LTC Edwin L. Kennedy Jr.**, USA Ret., is Assistant Professor at the U.S. Army Command and General Staff College in the department of Command and Leadership. He attended the U.S. Military Academy with GEN Petraeus.*

The Great Warpath's Influence on War Today

Conquered into Liberty: Two Centuries of Battles Along the Great Warpath that Made the American Way of War. *Eliot A. Cohen. Free Press. 432 pages; illustrations; maps; index; notes; $30.*

By COL Cole C. Kingseed
U.S. Army retired

Native American tribes called the 200-mile corridor between New York City and Montreal the Great Warpath. From Colonial times through the War of 1812, this strategic highway astride the Hudson River—and most particularly Lakes George and Champlain—witnessed the struggle for supremacy of the North American continent among Europeans, Americans, Canadians and Native Americans. Along the water and wilderness path, what became the fledgling American nation learned the intricacies associated with raising and equipping armies, developing light infantry tactics, and sustaining operations in a hostile environment. Here also, the Americans first conceived the strategy of "conquering into liberty" a hostile country, learning lessons that remain relevant today.

Eliot A. Cohen is a scholar of strategy and contemporary security policy. The author of the prize-winning *Supreme Command: Soldiers, Statesmen, and Leadership in Wartime*, Cohen is the Robert E. Osgood Professor of Strategic Studies at the Paul H. Nitze School of Advanced International Studies at Johns Hopkins University and is founding director of the Philip Merrill Center for Strategic Studies. A graduate of Harvard College, Cohen has taught at Harvard and the U.S. Naval War College. From 2007 to 2009 he was counselor to the U.S. Department of State, serving as Secretary Condoleezza Rice's senior advisor on strategic issues.

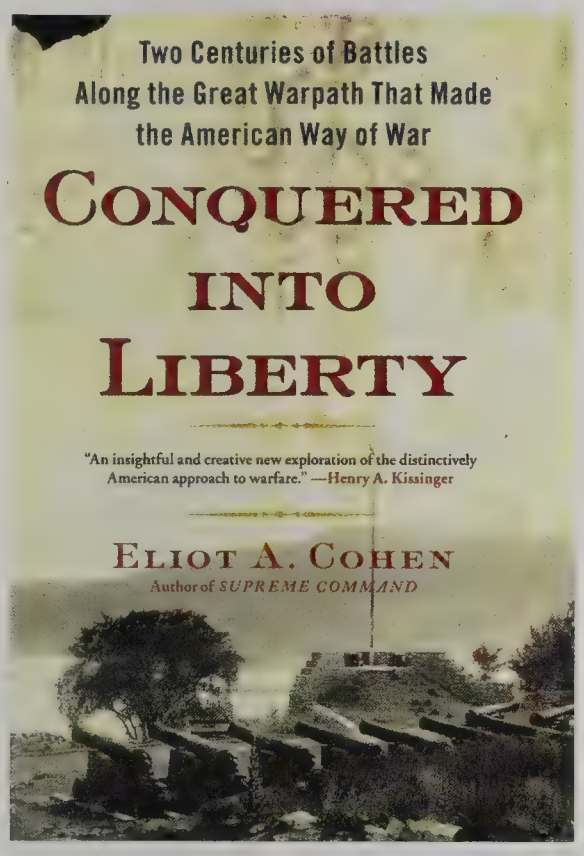
Broad in scope and gripping in its narrative, *Conquered into Liberty* is as informative as it is captivating. Cohen's thesis is straightforward: The military contest along the Great Warpath powerfully influenced American military institutions, strategic thought and military culture. To support his thesis, Cohen offers a "historical exploration through a careful examination of selected battles real and, in some cases, potential."

Why focus on the Great Warpath? Cohen posits that from the Colonial period through American independence, and for half a century afterward, the military struggle for what is now Canada was America's central strategic focus. Such an approach possessed more relevance during Colonial times and during the early stages of the United States' existence than it does in the period from the 19th century to the modern era.

Cohen's assessment of the dangers posed by the possibility of Great Britain tendering official recognition to the Confederacy is particularly intriguing. He outlines in detail Abraham Lincoln's frustration as he endured political humiliation at the hands of Great Britain during the *Trent* Affair, when an American warship stopped a British steamer and apprehended two Confederate agents. Once the tide of war turned in favor of the North, Lincoln became comfortable that "England [would] live to regret her inimical attitude toward us."

If anything, Cohen overplays the potential of war between the United States and Great Britain over the Canadian question during the period 1815 to 1871. By the time the Treaty of Washington was signed in May 1871 to settle the CSS *Alabama* claims and other commercial issues, British, American and Canadian diplomats had long resolved to settle all international disputes by diplomacy. The treaty, coupled with the subsequent evacuation of the British garrisons in Canada, ended a phase of American military history that had lasted two-and-a-half centuries.

How then did the Great Warpath influence American warfighting in the 20th century? Here, Cohen makes his most significant contribution to the concept of the evolution of an American way of war. According to Cohen, Anglo-American statesmen of the 18th century would have soberly endorsed President Franklin Roosevelt's



demand for unconditional surrender of the Axis Powers, for they too "had hardened on the destruction of an enemy polity." So, also, have today's special operating forces found their origins in Robert Rogers' Rangers during the French and Indian War. In addition, Cohen sees the operation in which Navy SEALs killed Osama bin Laden as nothing more than the cross-border operations that characterized the Great Warpath.

As for the continuing legacy of the Great Warpath to present-day America, Cohen reviews the campaigns along the Hudson River Valley during two-and-a-half centuries of conflict and concludes that the power of the United States is most effectively employed by leaders at mid-level roles—"leaders ... who rose to challenges that they did not expect; who learned trades, including the trade of war, that they had not chosen; and who exhibited perseverance and resilience that they may not have known they had in them." Such observations are more general in nature than tied to a specific American way of war.

Perhaps the more enduring legacy of the multiple attempts to "conquer Canada into liberty" is extracted from the chapter on the abortive American attempt to secure Canada as a 14th colony during the early stages of the American Revolution. In years to come, opines Cohen, "Americans in many places—from Mexico to the Philippines, Vietnam to Iraq—would behave similarly, waging wars for liberty and interest, conquering others into freedom ... with mixed motives and uncertain outcomes."

***COL Cole C. Kingseed**, USA Ret., Ph.D., a former professor of history at the U.S. Military Academy, is a writer and consultant.*

Varied Fare

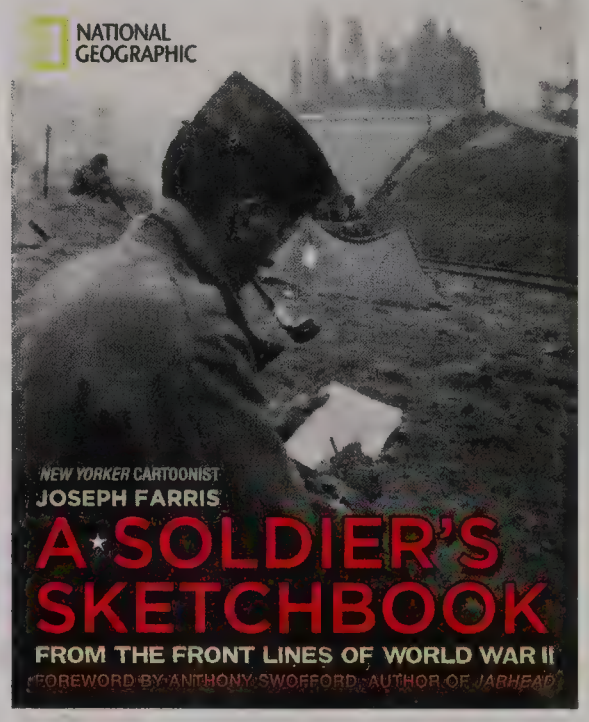
A Soldier's Sketchbook: From the Front Lines of World War II. *Joseph Farris. National Geographic Books. 304 pages; photographs; maps; illustrations; $30.*

Artist Joseph Farris, best known for his cartoons in *The New Yorker* magazine (his work has also appeared in many other publications, including ARMY Magazine), has written a book about his experiences as a soldier during World War II. The greater part of *A Soldier's Sketchbook: From the Front Lines of World War II* is made up of letters Farris wrote to his family while he was in the Army, interspersed with the author's reminiscences of the era. The book is amply illustrated with reproductions of Farris' sketches, watercolors and photographs as well as archival photos, maps and posters that place his story in a broader historical context.

Farris was born in 1924 in Newark, N.J. He spent his school age years in Danbury, Conn., where his parents owned the Danbury Confectionery, a small store operated by the entire family. Farris, who dreamed of becoming an artist, displayed his drawings of popular comic strip characters in a small room in the back of the shop. At the age of 12 or 13, he responded to an ad in a local newspaper for free art lessons given by some *New Yorker* cartoonists, most notably Richard Taylor. "Th[at] decision probably determined the direction my life would take," writes Farris.

Following high school graduation (with honors) in 1942, Farris was drafted into the Army in 1943 and, after training, assigned to the Infantry at Fort Bragg, N.C.

On October 6, 1944, men of the 100th Infantry Division—Farris among them—boarded the USS *General W.H. Gordon* and disembarked 14 days later at Marseilles, on the southern coast of France. Assigned to the 398th Infantry Regiment, 3rd Battalion, Company M, a heavy machine-gun squad, Farris traveled north to the front lines to relieve the 45th Division in the Vosges Mountains. He soon had his first encounter with enemy fire, in which his squad leader was killed in action. "Our morale couldn't have dropped any lower on that fateful day," he writes. Soon after, Farris received his Combat Infantryman's Badge: "Of all my decorations," he writes, "I'm most proud of this one."



In spite of the miserable conditions—cold and rainy weather, muddy foxholes, lack of sleep, the death of his comrades—Farris' letters home were mostly upbeat, as he didn't want his family to worry about him. In a letter written the day after the death of his squad leader he wrote, "Today was a super day as days over here go. I received three of your swell packages, and boy they hit the spot." He also had to contend with Army censorship, which prohibited him from revealing sensitive information such as troop movements. Farris fills in the gaps for the reader with his own commentary and excerpts from his company's official morning reports (which he secretly copied in their entirety at the war's end).

In March 1945, the 3rd Battalion captured the town of Bitche, on the Maginot Line, and was awarded the Presidential Unit Citation for its action. Shortly thereafter, the division crossed the Rhine River into Germany. While heavy fighting ensued along the Neckar River, Farris was on furlough in the town of Nancy, France.

After the surrender of Germany in May 1945, Farris worried that he and his fellow soldiers would be sent to fight in the Pacific Theater. "We had survived the war in the European Theater of operations and the odds were strongly against our surviving the invasion of Japan too," he writes. Again he was spared further combat, and in August he enrolled in an eight-week program at the Biarritz Army University, where he had his first formal training in art. Once the Japanese officially surrendered in September, Farris' main preoccupation was returning home. Finally, on January 31, 1946, he set sail for the United States from Bremerhaven, Germany. He was honorably discharged from the Army at Fort Dix, N.J., on February 22, having attained the rank of staff sergeant.

Farris writes that "World War II was an extraordinary experience and a defining moment" in his life. Through both words and pictures in *A Soldier's Sketchbook*, Farris brings his wartime experience to life in vivid detail.

—Joe Broderick

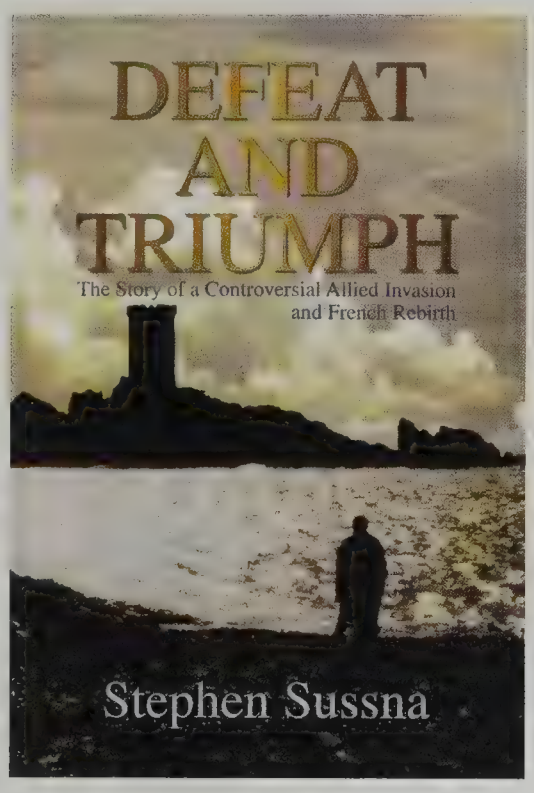
Barracks, Fort Bragg, N.C., 1944

Joseph Farris

Defeat and Triumph: The Story of a Controversial Allied Invasion and French Rebirth. *Stephen Sussna. Xlibris Corp. 719 pages; notes; appendices; bibliography; maps; black-and-white photographs. $24.64.*

Operation Anvil (later called Operation Dragoon), the Allied invasion of southern France on August 15, 1944, was always controversial. Churchill opposed it; Roosevelt and Eisenhower were for it. The operation succeeded in its goal of liberating most of France in about a month. Although it was a highly ambitious, large-scale operation, it has always been overshadowed by the even more ambitious Operation Overlord, the Normandy landings, which occurred two months earlier.

Stephen Sussna, a sailor on LST (landing ship, tank) 1012 during Operation Dragoon, tries to provide an encyclopedia on the subject. The book is an exhaustive examination of every aspect of the landings—individual narrative, operational and tactical details, and the strategic context. The maps, charts and information culled from unpublished interviews, letters and diaries of American, British, French and German participants offer most of the details needed to understand what



went on. Firsthand accounts are exciting; however, for a fast-moving narrative, readers may look elsewhere.

The author cites historian Alan Wilts' numbers regarding the size of the operation: 60,150 initial landing forces; 10 combat divisions; 250,000 troops; 2,250 ships and landing craft; and 4,056 aircraft.

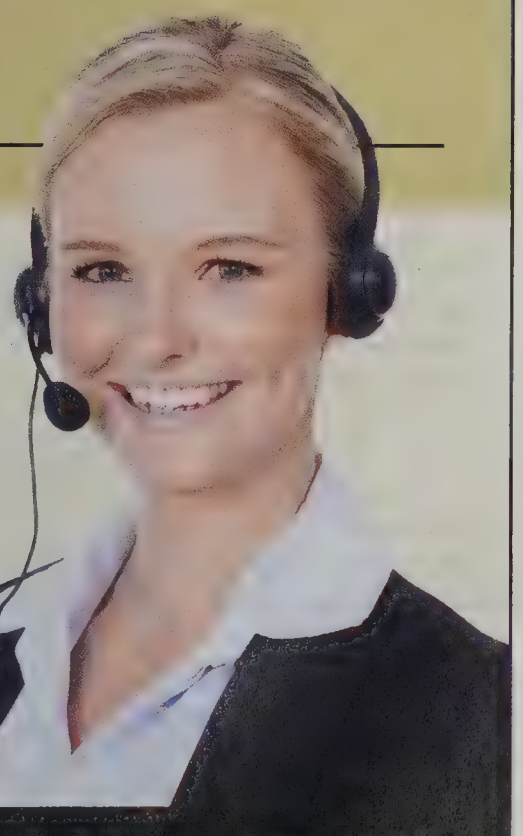
Sussna succeeds in presenting a comprehensive sense of the operation and its consequences. He notes that GEN George C. Marshall credited the landings of the U.S. Seventh Army under LTG Alexander M. Patch as greatly contributing to the deterioration of the German army in France. Sussna also observes that naval historian Samuel E. Morison considered Operation Dragoon "the nearly faultless large-scale amphibious operation of World War II."

Although some recognition of the Allied troops of Operation Dragoon and of LTG Jacob L. Devers, who was deputy supreme allied commander, Mediterranean and later U.S. 6th Army Group commander, occurred in August 2010 at the World War II Memorial in Washington, D.C., the operation is still known as the Forgotten D-Day.

Those who wish to learn more about it can dip into this thorough reference book.

ANNOUNCING

AUSA's Member Support Call Center



Our new call center is up and running.

The call center will answer AUSA membership related questions and concerns.

855-246-6269 **DIRECT DIAL**

ASSOCIATION OF THE US ARMY | 2425 Wilson Blvd. | Arlington, VA 22201

Historically Speaking

Shiloh at 150

By BG John S. Brown
U.S. Army retired

In February's "Historically Speaking," we discussed MG Ulysses S. Grant's successful seizures of Forts Henry and Donelson. Daringly exploiting the mechanized advantages of steamboats, he pushed upstream on both the Tennessee and Cumberland Rivers. He cut Confederate rail communications across these rivers and stood poised for even deeper penetrations into the middle South. His twin victories left the Confederates in Tennessee momentarily split in two, but an opportunity to defeat either wing in detail evaporated because of dithering among Grant's superiors as to who was in charge of what and what they should do next. A next logical geographical target for advancing Union forces was the rail line running from Memphis through Corinth, Miss.; Chattanooga and Knoxville to Petersburg and Richmond, Va. This was the only continuous rail line spanning the Confederacy from east to west. One had to travel 150 miles south of this line to find another high-volume east-west route, rail and water, running from Vicksburg through Montgomery to Atlanta.

Now master of the Tennessee River by virtue of Fort Henry and a fleet of armed steamboats, Grant's Army of the Tennessee had ready access to Pittsburg Landing, Tenn., within 20 miles of the strategic rail junction at Corinth. His forces began arriving there on March 11, 1862, and fanned out to occupy an assembly area dominated by scenic Shiloh Church. Meanwhile the Confederates, led by Generals Albert Sidney Johnston and P.G.T. Beauregard, recognized the hazards of their separation and the vulnerability of their rail line. They concentrated at Corinth, where they amassed 40,000 troops to slightly outnumber Grant's force of 35,000. The Confederates decided to attack.

For reasons that are not altogether clear, the security thrown up by Union forces around their expansive Shiloh assembly area was grossly inadequate. There had been perturbations in leadership as command passed from Grant for a while and then came back to him. Grant had been injured when his horse fell, and he was moving around on crutches. Grant's soldiers were supremely confident after their twin victories and went about training and preparing for future advances without giving much thought to local security. Grant and his superiors realized he would have to be reinforced to advance. Accordingly, he personally was positioned downstream at Savannah, about 10 miles from Pittsburg Landing, to facilitate the arrival of reinforcements from MG Don Carlos Buell's neighboring Army of the Ohio. Ultimately, Grant was so

A lithograph by Swedish-born artist Thure de Thulstrup depicts the two-day Battle of Shiloh, near Pittsburg Landing, Tenn., when Union forces struggled to hold the line against Confederate attack at the Sunken Road and the Hornet's Nest in April 1862.

Library of Congress

aggressive he is reputed to have given far more thought to what he was going to do to his adversary than to what his adversary was going to do to him.

Advancing along poor roads in thickly wooded terrain, the Confederates came on line undetected within two miles of divisions commanded by Brigadier Generals William T. Sherman and Benjamin M. Prentiss. Prentiss sent out heavy patrols during the early morning of April 6, and these almost immediately came into heavy contact. The volume of fire animated the previously careless Union leadership. Sherman and Prentiss got their divisions on line quickly, and divisions commanded by MG John A. McClernand and BG Stephen A. Hurlburt marched immediately to their relief. Nevertheless, the Confederate attack swept all before it for a time, forcing the embattled Union divisions back all along the line. Union camps were overrun. Union losses mounted. Unfortunately for the Confederates, they had oddly configured their deployment. One corps was on line in front and another on line behind. Neither corps had actual reserves. As the battle developed in the thick terrain, unrelated units became hopelessly jumbled together. On the few occasions that Confederates punched through or overlapped Federal lines, they had no forces with which to exploit.

Grant first heard the gunfire at 6:30 A.M. He sped by steamship to Pittsburg Landing, arriving at 8:30. En route, he dispatched orders rushing three additional divisions into the battle area. These were drawn from his own forces and those of MG Buell. Meanwhile, Grant's chief of staff gathered all the artillery he could muster and massed it facing east on a ridge extending south from Pittsburg Landing. At positions now memorialized as the Sunken Road and the Hornet's Nest, embattled Union forces struggled desperately to hold the line farther forward. When others were forced to withdraw, Prentiss squared off and fought on. He was finally overrun at 5:30 P.M., by which time reinforcements were arriving and a new line had formed, extending from the artillery now bristling over Pittsburg Landing. At 6:00 P.M. the Confederates—some out of ammunition and relying on bayonets—attempted a final assault on this formidable line. The assault failed. During the course of the day's fighting, Johnston—regarded by many at the time as the most promising of the Confederate generals—was killed, an incalculable loss.

Having been defeated on the first day at Shiloh, Grant contemplated the second. An iconic anecdote has Sherman coming up on Grant under a tree smoking a cigar and saying,

Library of Congress/Carol M. Highsmith Archive

A century and a half after some of the bloodiest fighting of the Civil War, the Hornet's Nest at Shiloh is part of the Shiloh National Military Park.

"Well Grant, we've had the Devil's own day, haven't we?" "Yes," Grant replied, then puffed on his cigar and continued, "Lick 'em tomorrow though." Rallying from initial unpreparedness, Grant and his lieutenants had demonstrated commendable initiative, leadership, energy and fortitude. They had also moved in 25,000 fresh troops in less than a day, whereas the Confederates had none. When the Union attacked on April 7, it inexorably pushed back the weakening Confederate line. At 2:30 P.M. Beauregard ordered a withdrawal. The surviving Confederates got away in the forested terrain, their retreat covered by LTG Nathan Bedford Forrest's capable cavalry.

Corinth fell shortly thereafter. Battlefield losses totaled about 13,700 for the Union and 10,700 for the Confederates. One Union brigade started the battle on April 6 with 2,750 men, resumed it on April 7 with 900, and ended that day with 58 combat-capable troops remaining. Some Northerners, appalled by the casualties and put off by Grant's alleged drinking, lobbied President Lincoln for Grant's relief. Lincoln famously retorted, "I can't spare this man, he fights." This, as we shall see, remained true. ★

Recommended Reading:

Esposito, Vincent J., *The West Point Atlas of American Wars, Volume I: 1689–1900* (New York: Frederick A. Praeger, 1959)

Foote, Shelby, *The Civil War, A Narrative, Vol. I: Fort Sumter to Perryville* (New York: Random House, 1958)

McPherson, James M., *Battle Cry of Freedom: The Civil War Era* (New York: Oxford University Press, 1988)

BG ***John S. Brown***, *USA Ret., was chief of military history at the U.S. Army Center of Military History from December 1998 to October 2005. He commanded the 2nd Battalion, 66th Armor, in Iraq and Kuwait during the Gulf War and returned to Kuwait as commander of the 2nd Brigade, 1st Cavalry Division, in 1995. He has a doctorate in history from Indiana University. His book,* Kevlar Legions: A History of Army Transformation 1989–2005, *was published in 2011.*

NET ZERO

Going green beyond the three steps of reduce, reuse and recycle inherent in the traditional symbol, the Army is working to manage its natural resources so that its installations are net-zero in energy, water and waste. Recognizing its energy and water requirements and aware of the threats to those supplies, the Army initiated the Net Zero Installation Strategy to reduce energy and water use as well as waste production. Managing its resources in a sustainable manner will ensure that the Army can meet its future needs.

U.S. Army

The net-zero approach is a hierarchy made up of five interrelated steps applied to energy, water and waste. Reduction includes maximizing energy efficiency, conserving water and eliminating unnecessary waste. Re-purpose involves diverting energy, water or waste to a secondary purpose. Recycling and composting consist of managing the solid waste stream, treating and reclaiming water, and reclaiming recyclable and compostable materials. Energy recovery entails converting unusable waste to energy, renewable energy or geothermal water sources. The final step is disposing of the remaining unusable elements.

A net-zero energy installation produces as much energy as it consumes in a year, resulting in net usage of zero. A net-zero water installation conserves its freshwater resources and returns water to the watershed to avoid depleting groundwater. A net-zero waste installation reduces, reuses and recovers waste with zero landfill. The Army selected pilot installations in each area. The map at right reveals the geographical distribution of the pilots, and color coding indicates the focus of their sustainable energy efforts—green for energy, blue for water and red for waste. Fort Hunter Liggett, Calif., and Fort Detrick, Md., are pilots in energy and waste. Fort Carson, Colo., and Fort Bliss, Texas, were named to attain net zero in all three areas. The Oregon Army National Guard will work toward energy sustainability statewide.

U.S. Army

THE APACHE ADVANTAGE: TRUE VALUE.
AH-64D Apache Block III delivers real, long-term value from its superior performance to dedicated lifecycle support. And countless innovations significantly extend the life of critical components to reduce lifecycle costs. The newest Apache, on-cost and on-schedule, is the most capable and effective combat helicopter in the world—with the advantage of true value everywhere.
BOEING

GRAY EAGLE | with Triclops Gimbal

THREE TIMES THE SITUATIONAL AWARENESS

- Three gimbals provide greater situational awareness
- Track and designate multiple targets simultaneously
- Apache Helicopter or ground forces control of multiple EO/IR gimbals onboard Gray Eagle
- Manned/unmanned teaming increases standoff range for attack aircraft
- Single aircraft can serve multiple users through interoperability

GENERAL ATOMICS AERONAUTICAL

©2012 General Atomics Aeronautical Systems, Inc. www.ga-asi.com Leading The Situational Awareness Revolution

ucation Periodicals
5.05 UNC
62, no. 5 (2012)
PERIODICAL
A

The Magazine of the Association of the United States Army

ARMY

May 2012 www.ausa.org $3.00

**********AUTO**ALL FOR ADC 604
116399 20120531 20120501
ACQUISITIONS DEPT.C03335933 0001
ACQUISITIONS DEPT.C03335933 001676
1408 W GREGORY DR P000010
URBANA IL 61801-3607 01:024350

Imagine what you'll save with the **OSHKOSH® L-ATV.**

At Oshkosh, we have an unwavering commitment to the men and women whose lives rely on our vehicles. Our JLTV solution is no exception.

The Oshkosh® L-ATV is a next-generation light combat vehicle that is tested, proven and ready to bring new capabilities to future missions. Today. With an advanced crew protection system, the Oshkosh L-ATV provides MRAP-level protection and the ability to scale and evolve as operating environments change. Its lightweight design and TAK-4*i*™ intelligent independent suspension system* deliver unprecedented off-road mobility, maneuverability and speed.

With so much relying on these vehicles, imagine what you'll save with the Oshkosh L-ATV.

oshkoshdefense.com

OSHKOSH® DEFENSE

*Patent pending

©2012 OSHKOSH CORPORATION Oshkosh and the Oshkosh logo are registered trademarks and TAK-4*i* is a trademark of Oshkosh Corporation, Oshkosh, WI, USA

LATV_001_2012-US-1

ARMY

MAGAZINE

MAY 2012
VOL. 62, NO. 5

PUBLISHED BY THE ASSOCIATION OF THE U.S. ARMY

www.ausa.org

FRONT & CENTER

Partner Capacity Building and U.S. Enabling Capabilities
By LTG James M. Dubik, USA Ret.
Page 20

Rebalancing May Require Reshaping Dangerous Habits
By Richard Hart Sinnreich
Page 23

Using Technology to Train America's Decisive Force
By LTG David G. Perkins, COL Robert (Pat) White and CPT Nathan K. Finney
Page 24

SMA William O. Wooldridge, USA Ret., 1922–2012
Page 25

James A. Baker III to Receive 2012 Marshall Medal
Page 27

FEATURES

The Network in Military Operations
By BG Charles A. Flynn, BG Wayne W. Grigsby Jr. and COL Jeff Witsken, USA Ret.
The effective use of a network of people enabled by technology and with a shared purpose is as necessary for future success as effective weapons systems. ***Page 30***

The Human Dimensions in the Close Fight
By MG Robert H. Scales, USA Ret.
Survival in small units depends on soldiers' ability to win the close fight. Doing so, the author argues, can be "amplified by better understanding the human dynamics." ***Page 35***

Supplying the Future of Army Logistics

Five articles highlight ongoing logistics activities under the U.S. Army's Office of the Deputy Chief of Staff, G-4 ***Page 39***

Unmanned Systems for Logistics
By Janina Plinsky, Demetrius Glass and John Yates
The Logistics Innovation Agency (LIA), field operating agency of the U.S. Army G-4, has developed air and ground unmanned systems that decrease the workload and reduce warfighter risk. ***Page 40***

The Freedrop Delivery System: Aerial Delivery Capability to Support Our Forces
By Craig Brammer and COL Daniel L. Labin, USA Ret.
The Logistics Innovation Agency, which has developed a variety of aerial delivery systems currently in use, is now focusing on the delivery of cargo using no parachutes. ***Page 47***

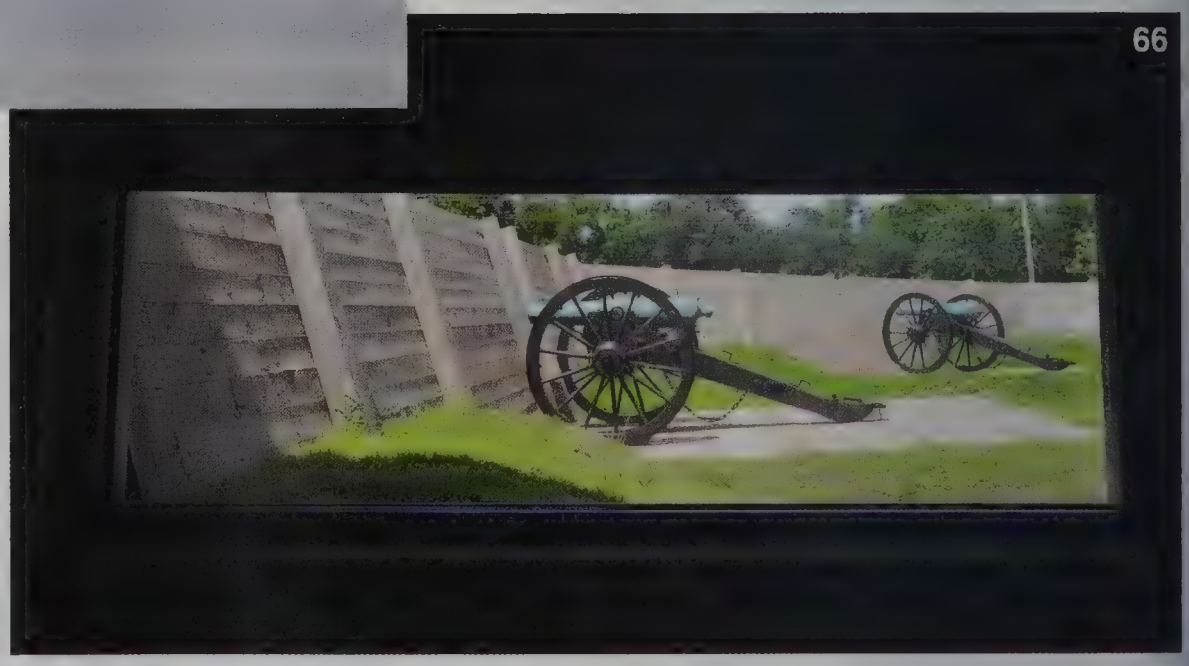
Balancing the Tactical Wheeled Vehicle Fleet to Army 2020: Divesting for Success
By LTC Royce A. Edington and LaVerne M. Douglas
The Army is beginning responsible divestiture of tactical wheeled vehicles so that the fleet is balanced with the Army's 2020 requirements. ***Page 51***

Army Mobility Asset Tracking System
By William D. (Bill) Jarrett
The AMATS system developed by the Army LIA is using mesh-networking technology to continuously track the retrograde of equipment from Operation New Dawn. ***Page 56***

The Energy Calculator: The Fully Burdened Cost Tool
By LTC Gerald E. Silva, USA Ret.
The unique "fully burdened cost tool" estimates the true cost of supplying fuel and water to the battlefield. ***Page 61***

ARMY CONTENTS

The U.S. Army Fixed Wing Project Office
By Scott R. Gourley
Consolidating the spectrum of fixed-wing aircraft under the U.S. Army Fixed Wing Project Office has produced both cost savings and manpower efficiencies.
Page 63



The Siege of Corinth:
The Union Takes a Ghost Town
By Dennis Steele
The National Park Service's Civil War Interpretive Center at Corinth, Miss., serves as an instructive memorial to the siege that followed the Battle of Shiloh/Pittsburg Landing. ***Page 66***

Company Command—Building Combat-Ready Teams:
The Platoon Leader-Platoon Sergeant Relationship
Current and past platoon leaders share experiences that verify the importance of the platoon leader-platoon sergeant relationship. ***Page 69***

DEPARTMENTS

Letters 4
Advertisers in This Issue 6
Washington Report 8
News Call 11

Sustaining Member Profile 74
Soldier Armed 75
Reviews 77
Historically Speaking 85

Panasonic
ideas for life

intel inside
CORE i5 vPro

Panasonic recommends Windows® 7.

Toughbook 31 Toughbook 19 Toughbook U1 Ultra

Access mission-critical information anywhere.
Fully-rugged Panasonic Toughbook® mobile computers, powered by the Intel® Core™ i5 vPro™ processor. Keeping you combat-ready with industry-leading reliability is how we're engineering a better world.

panasonic.com/business-solutions

ntel, the Intel logo, Intel Core, Intel vPro, Core Inside and vPro Inside are trademarks of Intel Corporation in the U.S. and/or other countries. Toughbook notebook PCs are covered by a 3-year limited warranty, arts and labor. To view the full text of the warranty, log on to panasonic.com/toughbook/warranty. Please consult your Panasonic representative prior to purchase. Panasonic is constantly enhancing product pecifications and accessories. Specifications subject to change without notice. ©2012 Panasonic System Communications Company of North America. All rights reserved. Mission-critical FG FY12-2

TOUGHBOOK®

SOLUTIONS FOR U.S. MILITARY

GEN Gordon R. Sullivan, USA Ret.
President, AUSA
LTG Theodore G. Stroup Jr., USA Ret.
Vice President, Education, AUSA

Mary Blake French — *Editor in Chief*
Paul W. Bartels — *Art Director*
Larry Moffi — *Managing Editor*
Dennis Steele — *Senior Staff Writer*
Toni Eugene — *Associate Editor*
Joseph L. Broderick — *Production Artist*
Jeremy Dow — *Assistant Editor*
Katharine Scott — *Assistant Editor*
Jocelyn Wascher — *Editorial Assistant*

Contributing Editors
GEN Frederick J. Kroesen, USA Ret.; LTG James M. Dubik, USA Ret.; and Scott R. Gourley

LTG Thomas G. Rhame, USA Ret.
Vice President, Finance and Administration, AUSA

James E. Burke — *Advertising Manager*
Meagan B. Bailey
Advertising Production Manager

Norman Campbell — *Fulfillment Director*
Valerie Holman — *Fulfillment Manager*

ARMY is a professional journal devoted to the advancement of the military arts and sciences and representing the interests of the U.S. Army. Copyright©2012, by the Association of the United States Army. ☐ **ARTICLES** appearing in ARMY do not necessarily reflect the opinion of the officers or members of the Council of Trustees of AUSA, or its editors. Articles are expressions of personal opinion and should not be interpreted as reflecting the official opinion of the Department of Defense nor of any branch, command, installation or agency of the Department of Defense. The magazine assumes no responsibility for any unsolicited material. ☐ **ADVERTISING**. Neither ARMY, nor its publisher, the Association of the United States Army, makes any representations, warranties or endorsements as to the truth and accuracy of the advertisements appearing herein, and no such representations, warranties or endorsements should be implied or inferred from the appearance of the advertisements in the publication. The advertisers are solely responsible for the contents of such advertisements. ☐ **RATES**. Individual memberships and subscriptions payable in advance (one year/three year): $21/$63 for E1-E4, cadets/OCS and GS1-GS4; $26/$71 for E5-E7, GS5-GS6; $31/$85 for E8-E9, O1-O3, W1-W3, GS7-GS11 and veterans; $34/$93 for O4-O6, W4-W5, GS12-GS15 and civilians; $39/$107 for O7-O10, SES and ES; life membership, graduated rates to $525 based on age; $17 a year of all dues is allocated for a subscription to ARMY Magazine; single copies, $3.00. Additional postage to all foreign countries, $15 per year. For other rates, write Fulfillment Manager, Box 101560, Arlington, VA 22210-0860.

ADVERTISING. Information and rates available from the Advertising Production Manager or our advertising representatives, who are:

The Audit Bureau

James E. Burke and **Irene Lamar**, 230 Park Ave., Suite 1546, New York, NY 10169. (212) 697-2844. FAX (212) 682-1421. Email: advdpt@aol.com.

ARMY (ISSN 0004-2455), published monthly. Vol. 62, No. 5. Subscription $34 a year. Publication offices: Association of the United States Army, 2425 Wilson Blvd., Arlington, VA 22201-3326. (703) 841-4300, FAX: (703) 841-3505, email: armymag@ausa.org. Visit AUSA's web page on the Internet at www.ausa.org. Periodicals postage paid at Arlington, Va., and at additional mailing office.
POSTMASTER: Send address changes to ARMY Magazine, Box 101560, Arlington, VA 22210-0860.

Letters

Improving Officer Evaluations

■ The revised officer evaluation report referenced by CPT George Athanasopoulos (March ARMY) and the inclusion of the Army Multi-Source Assessment and Feedback (MSAF) is a tremendous stride forward in the Army's leadership growth and development strategy.

Far from reverting to a steady state, over the past 15 years the Army has twice made adjustments to its officer evaluation system (OES) and leadership doctrine to reflect lessons learned and maintain relevancy in the evolving practice of land warfare.

The MSAF may well prove to be as transformative for the post-global war on terrorism Army as the after-action review was transformative for the post-Vietnam Army. What some decry as inadequate in preventing toxic leaders from developing—that is, the "hierarchical model" of rated officer, rater, and senior rater and block-check—produced every current serving general and field grade officer above the rank of major.

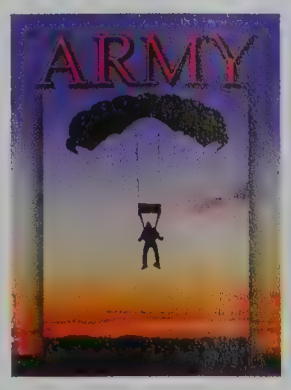
Sensationalist headlines with references to revolt, failure and toxicity grab attention and perpetuate the myth of a crisis in leadership. What these headlines fail to reveal is any causal link between the Army's current evaluation and screening methodology and the promotion of "toxic leaders." Far from an epidemic of toxic leadership, the recent relief of battalion and brigade commanders represents a single digit percentile across the entire active and reserve component force.

While the promotion and selection of poor leaders is unfortunate, the Army's track record continues to show that it will correct these deficiencies—all of which is largely irrelevant to the topic at hand: leadership development within the U.S. Army. The officer evaluation, MSAF, OES curricula, civil schooling, individual and unit leader programs, and mentoring provide our profession a variety of tools to coach, train, teach and educate Army officers on leadership and its application on current and future battlefields. None of these can be considered a panacea for the prevention of toxic leadership, and none should be. These are tools for developing inspired leadership for those serving in our Army. As professionals, let us focus our energies on utilizing these tools that have served—and continue to serve—our Army so well.

LTC Christopher H. Robertson
Boerne, Texas

In Memoriam

■ It's been a number of years since I last submitted an article to ARMY, but a beautiful story unfolded from one article you printed in the May 2000 issue. A retired Army major read the article and an 11-year friendship followed. Below is a letter I wrote his family following the notification I received of his death. He was 92 years old. The letter serves as a story I've long wanted to write. A beautiful friend, met through ARMY, has been lost.



This Month's Cover

A member of the U.S. Army Special Operations Command parachute demonstration team, the Black Daggers, prepares to land during the opening ceremony of the 23rd Annual Bataan Memorial Death March at White Sands Missile Range, N.M., on March 25. The memorial march honors servicemembers captured by the Japanese during the World War II invasion of the Philippines and what they endured, including the infamous Bataan Death March. For more information, see www.bataanmarch.com.
(Cover photo by U.S. Army/Daniel Liddicoet)

In memory of a long-time friend, Albert Dai Woon Sur of Honolulu

To the Sur family:

I want to tell you how grateful I am to you for having sent me the lovely booklet memorializing your father's passing. I also am grateful for an 11-year friendship with Al, whom I never met but who, for all those years, was my only connection to my birth father, who died in Okinawa in the final months of World War II. He is buried in the Punch Bowl.

You probably know our story: I wrote an article for ARMY Magazine following my only visit to my father's grave in 1999. Al read the article and wrote me a letter typed on an old-fashioned typewriter. He told me he had worked on the Punch Bowl in its early stages and that he was going to touch the grave and say to my father, "This is for you from Elaine." I sat there and cried at his kindness.

ARMY Magazine welcomes letters to the editor. Please send letters to The Editor, ARMY Magazine, AUSA, 2425 Wilson Blvd., Arlington, VA 22201. Letters may also be faxed to (703) 841-3505 or sent via email to armymag@ausa.org.

That was also the first Christmas I received a calendar from Hawaii with a card reminding me that my father was buried in "the most beautiful place on this earth." For 11 years I began watching the mailbox in mid-December, waiting for my calendar from the Hilo-born man who survived the attack on Pearl Harbor and retired as a major from the U.S. Army. I was never disappointed. He sent me calendars of Hawaii, Kauai, Maui, Hawaiian flowers, Hawaiian beaches and more.

Each year I hung my calendar up, flipping each month to reveal a new island beauty in one form or another. The notes that came with the calendars reminded me of my father's resting place and that Al hadn't forgotten me, so far away from the father I never got to know.

Once I sent Al a photo of me with my husband and son at our son's wedding, and he sent me a copy of a news clip featuring himself as a young surfer in Guam. The article had a small photo of Al as an older adult as well.

Tears welled up when I read the memorial, although I had suspected something was amiss when I didn't get the calendar this past December.

I had hoped to return to Hawaii one day, and I especially wanted to meet Al. If I ever do return, I would like to meet you, his family.

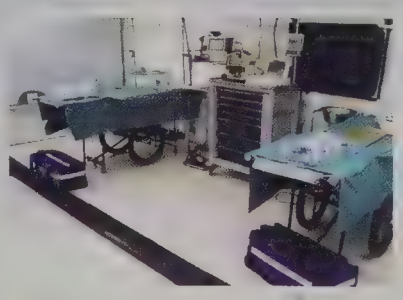
It has been a pleasure and an honor to have known your father, even from afar, and I mourn with you his passing.

ELAINE MARKOWITZ
Palm Harbor, Fla.

Enhancing Capabilities. Sustaining Readiness.

REPAIR

INTEGRATION



REFURBISHMENT

TESTING

SUSTAINMENT

TRAINING

Factory to Foxhole Support

- Supporting the Unit **Commander** and the **Warfighter**
- Meeting Operational Commander's requirements for **Flexible Cost-Effective Support**
- Providing **Program-Wide Solutions** and **Life-Cycle Support**

With state-of-the-art facilities in Texas, North Carolina, and California, AAR Mobility Systems provides responsive, customized, value-based support to meet today's and tomorrow's operational readiness demands for deployment, tactical mobility, and continued employment in theater. We lead the market in supporting systems including FMTV, UAS Shelters, SATS, Expandable Shelters, and C4 Shelters.

World Leader in Solutions for Sheltered and Containerized Systems

Darin Gilderoy
Director, Services BD
800.355.2015
msservice@aarcorp.com

AAR Mobility Systems

Troops and PTSD

■ Post-traumatic stress disorder (PTSD) is not a mental disorder. It is a physical injury caused by chemical changes in the brain.

There are numerous discussions about Army SGT Robert Bales and the killing of 17 Afghans in March. I believe we are all horrified when such actions are committed by our soldiers.

As a Vietnam War veteran I recall the 1968 My Lai massacre, when American soldiers went on a rampage killing innocent Vietnamese villagers. The nation could not understand our soldiers acting in such a manner any better back then than they do now.

I was in Vietnam in 1969 and heard about My Lai. We all discussed it and agreed something must have gone seriously wrong because we, in uniform, would never do anything like that. We excused it by concluding: "The leaders of the massacre must have been nuts at the time."

Today, things are different because we are now beginning to see research that proves PTSD exists and can be found in magnetic resonance imaging (MRIs).

We have learned that post-traumatic stress affects the neurons in the brain. This is a natural occurrence we all experience. When we are in a stressful or dangerous situation our brain reacts and puts us in a "fight or flight" mode. The chemistry reverts back to normal when the event is over. For those with PTSD, the chemical balance does not completely return to normal, which causes the symptoms of this condition. The more stress experienced, the more these chemicals remain; the result is this injury—PTSD. Indeed, several notable studies have shown that MRI scans confirm a chemical change that causes the person to be more sensitive to unfamiliar scenarios and provide a high-stress response to those situations.

When I speak to veterans about PTSD, I tell them it should not be called a disorder; it should be called post-traumatic stress injury. It has absolutely nothing to do with a person's supposed mental weakness or a flaw in one's character. Those who have this ailment almost immediately feel relieved to know they have an injury. They also begin to see, because it is a physical wound, that a cure is possible.

Whether you are a veteran or have family members who have served, you have to recognize post-traumatic stress as a physical wound, not different from being shot. It must be treated and addressed as one would a wound of the flesh, and help must be suggested on the same basis as a wound that bleeds.

The bond that is built during combat is difficult to explain, but it lasts a lifetime. Many soldiers feel the honor to serve is above any personal feelings. Thus soldiers trained to be aggressive and ready to face danger find it very difficult to understand how it might affect them in the future. You can't build an army without this training.

Our soldiers today are volunteers, and they take great pride in what they do. That pride, at times, interferes with today's analysis of combat stress, and the answers given during evaluations may not represent their true feelings. The only way to truly diagnose our soldiers for this ailment is by MRI. Unfortunately, that is not logistically possible at this time.

We all can help by educating ourselves on this issue so that we can intelligently discuss the stress our soldiers have experienced. We also must understand that those relatives who have gone off to war will not return home as the same people. It is now up to us to assist our current returning heroes and make certain they understand post-traumatic stress injury and that there is hope in the future.

TOM CRISER
Corpus Christi, Texas

Lincoln's Global Vision

■ In COL Cole C. Kingseed's review of Gary W. Gallagher's book *The Union War* in the March issue, the final paragraph is compelling. He quotes Secretary of State William Seward on the Union's achievement as the war's victor: "Their great work is the preservation of the Union and in that, the saving of popular government for the world."

In addition to Seward's conclusion, President Lincoln, early in his first term, said, "We must settle this question now, whether in a free government the minority have the right to break it up whenever they choose. If we fail it will go far to prove the incapability of the people to govern themselves."

These two statements are particularly noteworthy since they were made when the great American experiment of a people's government was still in its historic infancy. This is not to dismiss the Civil War's impact upon the issues of slavery, the restoration of the Union and the importance of states' rights. Moreover, had Lincoln not prosecuted a war against seceding states, these major issues might not have been solved by the patience of cooler-headed representatives or by the calming effects of the passage of time. Perhaps Lincoln directed McDowell's army to move on Richmond to show the kings and dictators throughout the world that a government by the people can be sustained. If that was the case, then we owe greater thanks to President Lincoln than we normally admit and bestow.

LTC FRANK KOLAR JR., USA RET.
Columbus, Ga.

ADVERTISERS IN THIS ISSUE

AAI Corporation	Cover IV
AAR Mobility Systems	5
ARMY Green Book	46
AUSA Annual Meeting	10, 82, 83
AUSA Membership	16
Caterpillar, Inc.	7
Cubic Global Tracking Solutions	13
DHS Technologies LLC	37
General Dynamics C4 Systems	43
iRobot Corporation	21
Leupold & Stevens	19
Lockheed Martin	9
Oshkosh Defense	Cover II
Panasonic Toughbook	3
Pelican Products, Inc.	Cover III
RAM Mounts	15
Revision Military Inc.	45
SRC, Inc.	29
Streamlight, Inc.	22
SureFire, LLC	33

ADVERTISING. Information and rates available from the Advertising Production Manager or our advertising representatives, who are:

The Audit Bureau

James E. Burke and **Irene Lamar**, 230 Park Ave., Suite 1546, New York, NY 10169. (212) 697-2844. FAX (212) 682-1421. Email: advdpt@aol.com.

CAT® HEAVY EQUIPMENT

TRAINING & SAFETY COURSE

July 9 to 13, 2012 | Peoria, IL | Registration Deadline: June 1, 2012

Leading in Technology...

Are your Operators and Maintainers Ready?

Caterpillar Edwards Demonstration & Learning Center – Peoria, IL

Whether it's meeting EPA Emissions Standards, increasing fuel economy, or integrating the latest grade control or electric-drive technology into our world-class construction equipment, you can rely upon Caterpillar for all your equipment, product support, and training solutions.

Caterpillar's Defense and Federal Products Division is offering two concurrent Training & Safety Courses in July 2012. One focused on operator training and the second focused on maintenance training. Participants will experience the equipment evolution first hand, with training in the following areas:

Basic Equipment Operation, Safety, Technology Upgrades, Performance and Fuel Economy Enhancements, Diagnostics and other Maintenance Procedures.

CONTACT YOUR ACCOUNT MANAGER TO REGISTER TODAY:

JAN KIRKTON
309.675.4405
Kirkton_Janet_L@cat.com
- *US Army*
- *US Army Public Works*
- *US Army National Guard*
- *US Army Reserves*

LORIE HUFF
309.494.3430
Huff_Lorie_A@cat.com
- *US Army*
- *US Army Corps of Engineers*

MELVIN OTTLEY
309.578.8068
Ottley_Melvin_L@cat.com
- *US Air Force*
- *US Air National Guard*
- *DRMO*

SCOTT TOMBLIN
309.578.2244
Tomblin_Scott@cat.com
- *USMC*
- *US Navy*
- *USMC/USN DPW*

RICH GARDNER
309.578.3984
Gardner_Rich_M@cat.com
- *Customer Support Program Manager*

www.catdfp.com

CAT®

© 2012 Caterpillar | All Rights Reserved | CAT, CATERPILLAR, their respective logos and "Caterpillar Yellow", as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.

Washington Report

DoD Proposes Additional BRAC Measures

DoD's request that Congress authorize two additional Base Closure and Realignment (BRAC) rounds (in fiscal years 2013 and 2015) in order to reduce the defense budget met with such strong opposition in late March that the Pentagon announced it will use its own authority to close bases with fewer than 300 civilian personnel if the authorization is denied.

DoD asserts that closing bases and adjusting forces are critical to reducing infrastructure costs as the Pentagon tries to cut $487 million from its budget over 10 years. DoD Comptroller Robert F. Hale told the Senate Armed Services Committee that "even with planned force cuts … BRAC is the only effective means to meet that goal." Sen. Claire McCaskill (D-Mo.), head of the panel with jurisdiction over military installations, said she would block any attempt to create a new BRAC commission. The Pentagon, she said, has not made its case that base closure would be beneficial and has not presented a plan for the closings nor an estimate of the up-front costs. McCaskill said she is willing to close bases overseas but will not permit any plan to close U.S. installations to move ahead. "There is one area where there is absolutely no room for compromise this year: BRAC," she said. It takes only one senator to block the legislation.

If Congress fails to act, Pentagon officials warned, DoD will take the initiative. Deputy Under Secretary of Defense for Installations and Environment Dorothy Robyn told a congressional panel that installations "below 300 civilian personnel with the appropriate notification procedural steps are and can be done outside of the BRAC process." DoD, she said, has never actually been successful in using it, but the authority rests in section 2687 of Title X. The BRAC process is better for communities, said Robyn, so DoD is reluctant to proceed without it.

SG Defends PTSD Diagnoses. In response to the reversal of hundreds of soldiers' PTSD diagnoses at Madigan Army Medical Center at Joint Base Lewis-McChord, Wash., Surgeon General of the Army LTG Patricia D. Horoho told a Senate subcommittee in late March that the military uses the same method as the civilian sector to diagnose post-traumatic stress disorder (PTSD). "It's the one standard that's out in the civilian sector as well as the military," she said. "It's the best standard out there for diagnosing PTSD." LTG Horoho said she has launched a system-wide Inspector General assessment of the Army's treatment facilities and provision of care.

At Madigan, the numbers of PTSD diagnoses reversed by a forensic psychiatry team led to speculation that the financial costs of treatment were influencing the evaluations. According to LTG Horoho, an Army investigation at Madigan has just been completed and is currently under review. The Army is also reevaluating more than 300 patients who have had their PTSD diagnoses changed at Madigan since 2007.

LTG Horoho said that the Inspector General's review of treatment facilities will determine "whether we had this practice of using forensic psychiatry or psychology in the medical evaluation process." The aim of the assessment is to ensure that standardized diagnostic procedures are followed. LTG Horoho said that since becoming Surgeon General last December, she has focused on care for PTSD, brain injuries and behavioral health.

U.S. Army/Rob McIlvaine

LTG Patricia Horoho

Changes in TRICARE Dental. Congress recently approved changes to the TRICARE Dental Program (TDP) that open the survivor benefit to a larger segment of the military population, including children of survivors.

Among the changes in the survivor benefits of the TDP, survivors no longer need to have prior enrollment in TDP at the time of the sponsor's death in order to receive the TDP survivor benefit. In such cases the government will notify eligible surviving family members not enrolled in TDP at the time of the sponsor's death, and the surviving spouse, parent or dependent 18 years of age or older may complete the enrollment process for the TDP survivor benefit to take effect. Surviving children are eligible for survivor benefits through the end of the month in which they turn 21, or 23 if they are enrolled full-time in an accredited university or college.

In addition to these changes, effective the first of this month, MetLife becomes the dental carrier for TDP. Among the changes in TDP benefits effective May 1 through MetLife are:

- Tooth-colored/white fillings on back teeth are covered.
- There is no cost for scaling and deep cleaning for diabetics.
- A third cleaning is covered for women during pregnancy.

United Concordia will continue to administer the Active Duty Dental Program.

For more information, visit http://www.tricare.mil/mybenefit/home/Dental/DentalProgram.

LIGHT ON WEIGHT.
HEAVY ON PROTECTION.

The Lockheed Martin Joint Light Tactical Vehicle is production-ready and blast-proven. Our vehicles have been through a rigorous boot camp of mountainous and desert terrain. They've driven over 160,000 combined miles. And while JLTV is heavy on force protection, Army and Marine helicopter lift tests also show it is light and transportable. Its dual performance for both the Army and the Marines makes it the most affordable choice for any mission. Equipped with Lockheed Martin's systems integration experience and BAE Systems' innovative protection, we're making sure JLTV is secure, reliable and ready to go.

THE LOCKHEED MARTIN TEAM

LOCKHEED MARTIN BAE SYSTEMS

JLTV

www.lockheedmartin.com/jltv

2012 AUSA

ANNUAL MEETING AND EXPOSITION

A Professional Development Forum

22-24 OCTOBER 2012

Walter E. Washington Convention Center, Washington, DC | www.ausa.org

FOR MORE INFORMATION CONTACT:

AUSA, Industry Affairs

1-800-336-4570 • 703-841-4300 • Fax: 703-243-2589

News Call

Coalition Will Stay the Course in Afghanistan

MG William Mayville, commander of 1st Infantry Division, took command of the 14 provinces that make up Regional Command-East (RC-E) in April. As commander of RC-E, MG Mayville will lead five U.S. combat brigades, one U.S. combat aviation brigade and brigades of two NATO partner nations.

Despite the setbacks to coalition efforts in Afghanistan and Afghan president Hamid Karzai's demands for the withdrawal of foreign forces from rural areas and an end to night raids, MG Mayville said in an interview with Associated Press (AP) that he believes the United States and its partners will stick to the current strategy in Afghanistan. That plan calls for the reduction of U.S. forces from the current level of some 90,000 to 68,000 by the end of this summer and the transition of security to Afghan forces by the end of 2014. A NATO summit in Chicago later this month will address the security relationship with Afghanistan beyond that time.

Part of the U.S. drawdown will be accomplished by transferring more of the security responsibilities to Afghan forces particularly in the south and shifting focus to the eastern part of the country, which MG Mayville said "is the most complex area of all the battle spaces." Insurgent attacks increased last year in that mostly mountainous region that includes 450 miles of the Afghanistan-Pakistan border.

MG Mayville said he has been encouraged by the growing numbers of competent and committed Afghan military leaders, but that progress must be connected "to the efforts to build a viable Afghan government at the local, provincial and national level[s]."

As MG Mayville and approximately 700 1st Infantry Division staff members took over RC-E, other soldiers who will help transfer the security mission to Afghan forces also deployed. They were the first small teams of officers, usually from the same unit, to embed with and train Afghan troops, and they prepared for the mission with three weeks of specialized training at the Joint Readiness Training Center at Fort Polk, La. Because of increased tension, the advisory teams are specifically trained to watch for suspicious behavior in the security forces among whom they are embedded.

GEN David Rodriguez, commanding general of U.S. Army Forces Command, told AP that the first 47 advisory teams would deploy to southern Afghanistan in April and 46 more will head to eastern Afghanistan this month. "It's a way to thin the lines and put fewer of us over there and have more of them do what they have to do," said GEN Rodriguez.

Upcoming Deployments. The Department of Defense has named six major units to deploy this spring as part of the upcoming rotation of forces operating in Afghanistan. The scheduled rotation of approximately 10,270 personnel involves one corps headquar-

Rangers Honored. *Left to right, SGT Nicholas Blohm, SGT Joshua Boswell and SGT Justin Goucher from the 1st Battalion, 75th Ranger Regiment, march from the Hunter Army Airfield, Ga., parade grounds in March after receiving medals for their service during a deployment to Afghanistan last fall.*

GENERAL OFFICER CHANGES*

LTG R.B. Brown from CG, MCoE and Fort Benning, Fort Benning, Ga., to CG, I Corps and JB Lewis-McChord, JB Lewis-McChord, Wash.

LTG D.D. Halverson from CG, FCoE and Fort Sill, Fort Sill, Okla., to Dep. CG/CoS, TRADOC, JB Langley-Eustis, Va.

LTG R.P. Lennox from Dep. CoS, G-8, USA, Washington, D.C., to Principal Dep. Dir. CAPE, OSD, Washington, D.C.

LTG J.W. Talley, USAR, CG, 84th Training Cmd. (Unit Readiness), Fort Knox, Ky., to Chief, USAR/CG, USARC, Washington, D.C.

MG J.S. Buchanan from Dir., J-9, USF-I to Dep. CG, I Corps and JB Lewis-McChord, JB Lewis-McChord, Wash.

MG A.A. Cucolo III from Dir., Force Development, G-8, USA, Washington, D.C., to Cmdt., USAWC, Carlisle Barracks, Pa.

MG P.J. Donahue II from Dir., Concept Development and Learning, ACIC, JB Langley-Eustis, Va., to Dir., Force Development, G-8, USA, Washington, D.C.

MG K.S. Dowd from CG, 1st TSC, Camp Arifjan, Kuwait, to Dir., Logistics Ops., DLA, Fort Belvoir, Va.

MG M.R. Eyre, USAR, from Dep. Chief of Engineers for Reserve Component, OCE, Washington, D.C., to CG, USACE, Trans-Atlantic Division, Winchester, Va.

MG W.M. Golden Jr. from Dep. Cmdr. for Police, NTM-A, to Dep. CG, Eighth U.S. Army, Korea.

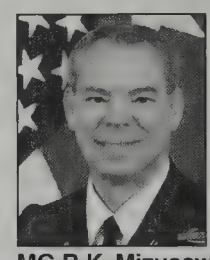
MG P.J. LaCamera from Dep. CG, 25th Infantry Div., Schofield Barracks, Hawaii, to Dep. CG, USASOC, Fort Bragg, N.C.

MG C.D. Luckey, USAR, from Asst. to the CJCS for Reserve Matters, Jt. Staff, Washington, D.C., to CoS, USNORTHCOM, Peterson AFB, Colo.

MG J.W. Mathis III, ARNG, from Dep. Dir. for Anti-Terrorism/Homeland Defense, J-34, Jt. Staff, Washington, D.C., to Cmdr., JTF-CS, USNORTHCOM, JB Langley-Eustis, Va.

MG J.M. McDonald from CG, USACC and Fort Knox, Fort Knox, Ky., to CG, FCoE and Fort Sill, Fort Sill, Okla.

MG H.R. McMaster Jr. from Cmdr., CJITF-Shafafiyat, ISAF, OEF, Afghanistan, to CG, MCoE and Fort Benning, Fort Benning, Ga.



MG B.K. Mizusawa, USAR, from Dep. Dir. for Strategic Initiatives, J-5, Jt. Staff, Washington, D.C., to Asst. to the CJCS for Reserve Matters, Office of the Chairman, JCS, Washington, D.C.

MG F.S. Rudesheim from Dep. Dir. for Jt. and Coalition Warfighting, J-7, Jt. Staff, Suffolk, Va., to CG, U.S. Army South, Fort Sam Houston, Texas.

MG J.A. Smith from Dir., USAAC Discontinuance Task Force, Fort Knox, Ky., to CG, USACC and Fort Knox.

Brigadier Generals: **B.A. Becker** from Dep. CG (Spt.), 25th Infantry Div., Schofield Barracks, Hawaii, to Asst. Dep. Dir. for Jt. Training, J-7, Jt. Staff, Suffolk, Va.; **D.J. Bishop** from CoS, Third Army/USARCENT, Shaw AFB, S.C., to Asst. SG for Warrior Care and Transition/CG, WTC, ODAS, Alexandria, Va.; **J.B. Burton** from Dep. Dir. for Ops., NMCC, Ops. Team-1, J-3, Jt. Staff, Washington, D.C., to Asst. Div. Cmdr., 2nd Infantry Div., Eighth U.S. Army, Korea; **T.J. Edens** from Asst. Div. Cmdr., 2nd Infantry Div., Eighth U.S. Army, Korea, to CG, USACR Ctr./Dir. of Army Safety, Fort Rucker, Ala.; **M.X. Garrett** from CoS, XVIII Airborne Corps, Fort Bragg, N.C., to CG, USARAK/Dep. Cmdr., ALCOM, Fort Richardson, Alaska; **W.W. Grigsby Jr.** from CG, MC CoE, Fort Leavenworth, Kan., to Dep. CG, 1st Armored Div., Fort Bliss, Texas; **C.W. LeMasters Jr.** from Cmdt., USAOS, SCoE, Fort Lee, Va., to CG, 13th ESC, Fort Hood, Texas; **W.T. Lord**, ARNG, from Asst. Div. Cmdr. (Maneuver), 28th Infantry Div., Pa. ARNG, to Dep. Senior Mil. Rep./Chief, NATO Advisory Team-Sarajevo, Bosnia-Herzegovina; **T.P. McGuire** from Dep. Chief, Legislative Liaison, OSA, Washington, D.C., to Dep. Cmdr., 101st Airborne Div. (AA), Fort Campbell, Ky.; **P.M. Nakasone** from Dep. Dir. for Trans-Regional Policy, J-5, Jt. Staff, Washington, D.C., to Dir., IDC, HQ, IJC, OEF; **L.J. Richardson** from CG, USAOTC, Fort Hood, Texas, to Dep. CG, 1st Cav. Div., Fort Hood; **S.A. Shapiro** from Dep. CoS, G-4, USAREUR and Seventh Army, Germany, to Dir., Materiel Enterprise Integration and Retrograde Ops. Ctr., USF-A, OEF, Afghanistan; **C.L. Taylor** from Asst. Div. Cmdr. (Maneuver), 2nd Infantry Div., Eighth U.S. Army, Korea, to CoS, Third Army/USARCENT, Shaw AFB; **B.K. Thompson** from Dep. Dir. for Ops., NMCC, J-3, Jt. Staff, Washington, D.C., to Dep. Cmdr., 25th Infantry Div., Schofield Barracks, Hawaii; **P.D. Utley** from Dep. CoS, Ops. and Training, TRADOC, JB Langley-Eustis, Va., to Sen. Cmdr., Fort Stewart, Ga.; **R.P. White** from Dep. Cmdr, CAC-T, TRADOC, Fort Leavenworth, Kan., to Dep. Cmdr., 3rd Infantry Div. (Maneuver), Fort Stewart, Ga.; **D.A. Williams** from Asst. SG for Warrior Care and Transition/CG, WTC, ODAS, Alexandria, Va., to Asst. Div. Cmdr., 2nd Infantry Div., Eighth U.S. Army, Korea.

■ ***ACIC**—Army Capabilities Integration Center; **ALCOM**—U.S. Alaskan Cmd.; **ARNG**—Army National Guard; **CAC-T**—Combined Arms Center-Training; **CAPE**—Cost Assessment and Program Evaluation; **CJCS**—Chairman of the Jt. Chiefs of Staff; **CJITF**—Combined Joint Interagency Task Force; **CoS**—Chief of Staff; **DLA**—Defense Logistics Agency; **ESC**—Support Cmd. (Expeditionary); **FCoE**—U.S. Army Fires Center of Excellence; **HQ**—Headquarters; **IDC**—Information Dominance Center; **IJC**—International Security Assistance Force Jt. Cmd.; **ISAF**—International Security Assistance Force; **JB**—Joint Base; **JCS**—Jt. Chiefs of Staff; **JTF-CS**—Joint Task Force Civil Support; **MCoE**—U.S. Army Maneuver Center of Excellence; **MC CoE**—Mission Command Center of Excellence; **NMCC**—National Military Command Center; **NTM-A**—NATO Training Mission-Afghanistan; **OCE**—Office of the Chief of Engineers; **ODAS**—Office of the Director of the Army Staff; **OEF**—Operation Enduring Freedom; **OSA**—Office of the Secretary of the Army; **OSD**—Office of the Secretary of Defense; **SCoE**—U.S. Army Sustainment Center of Excellence; **SG**—Surgeon General; **TRADOC**—U.S. Army Training and Doctrine Cmd.; **TSC**—Theater Sustainment Cmd.; **USAAC**—U.S. Army Accessions Cmd.; **USACC**—U.S. Army Cadet Cmd.; **USACE**—U.S. Army Corps of Engineers; **USACR**—U.S. Army Combat Readiness; **USAOS**—U.S. Army Ordnance School; **USAOTC**—U.S. Army Operational Test Cmd.; **USAR**—U.S. Army Reserve; **USARAK**—U.S. Army Alaska; **USARC**—U.S. Army Reserve Cmd.; **USARCENT**—U.S. Army Central Cmd.; **USAREUR**—U.S. Army Europe; **USASOC**—U.S. Army Special Ops. Cmd.; **USAWC**—U.S Army War College; **USF-A**—U.S. Forces-Afghanistan; **USF-I**—U.S. Forces-Iraq; **USNORTHCOM**—U.S. Northern Cmd.; **WTC**—Warrior Transition Cmd.*

*Assignments to general officer slots announced by the General Officer Management Office, Department of the Army. Some officers are listed at the grade to which they are nominated, promotable or eligible to be frocked. The reporting dates for some officers may not yet be determined.

SPOTLIGHT:

Global Tracking Solutions

- True global coverage utilizing Mesh, GSM, and Iridium
- Two-way communication for remote configuration and upgrades
- Communicates information through secure and encrypted data
- Expanded asset visibility, including temperature, humidity, shock sensor, light, acceleration
- Extended battery life as a result of revolutionary power management

FIRST IN INNOVATION

Customers around the world rely on Cubic to deliver advanced systems for high-fidelity training, tactical communications, global asset tracking, and cross-domain cyber security solutions. Cubic provides customers the technology, products and support needed to fight, win and return.

CUBIC

www.cubic.com

9333 Balboa Avenue, San Diego, CA 92123 • 858-277-6780

ters (HQ), one division HQ, one brigade combat team HQ, two brigade combat teams (BCTs) and a combat aviation brigade:

- V Corps HQ, Wiesbaden, Germany, more than 500 personnel.
- 1st Infantry Division HQ, Fort Riley, Kan., more than 700 personnel.
- 76th Infantry BCT HQ, Indiana Army National Guard, more than 70 personnel.
- 173rd Airborne BCT, Vicenza, Italy, more than 3,600 personnel.
- 4th BCT, 4th Infantry Division, Fort Carson, Colo., more than 3,000 personnel.
- 12th Combat Aviation Brigade, Katterbach, Germany, more than 2,400 personnel.

Women Vets Recognized. The U.S. Army Women's Foundation hosted a ceremony in March inducting women who served in Vietnam into the Army Women's Hall of Fame. More than a dozen representatives of the Army women who served in Vietnam participated in the event in Washington, D.C. They were presented with a memento of their service that will be placed in the Women in Military Service for America memorial at Arlington National Cemetery. All had served with the Women's Army Corps in Vietnam when occupations for women in the Army were limited to roles such as nurses and clerks. Including all the military services, some 11,000 American women served in Vietnam.

New Mom Qualifies. Only four months after giving birth, U.S. Army World Class Athlete Program (WCAP) member CPT Mickey Kelly competed in March against women from 27 nations to qualify for the 2012 Modern Pentathlon World Cup final, continuing her quest for a place on the U.S. Olympic team. The five-sport event—pistol shooting, fencing, 200-meter

Olympics hopeful CPT Mickey Kelley

COMMAND SERGEANTS MAJOR CHANGES*

CSM R.R. Kelley from 3rd Infantry BCT, 1st Cavalry Div., Fort Hood, Texas, to 1st Armored Div. and Fort Bliss, Texas.

CSM J.E. Riddick from SDDC, Scott AFB, Ill., to CASCOM, Fort Lee, Va.

CSM G.L. Tyce from 160th Signal Bde., Camp Arifjan, Kuwait, to 5th Signal Cmd., Germany.

■ *CASCOM—U.S. Army Combined Arms Support Cmd.;* ***SDDC****—U.S. Army Military Surface Deployment and Distribution Cmd.*

*Command sergeants major positions assigned to general officer commands.

RAM® MILITARY MOUNTS

Contractors who trust RAM®

NORTHROP GRUMMAN

Raytheon

LOCKHEED MARTIN

Rockwell Collins

TRW

DRS TECHNOLOGIES

THE RAM® MOUNT ADVANTAGE

- RAM® Shock Absorbing Mounts Protect Electronics for Improved Reliability
- Field Proven for Over 15 Years
- Made in the USA
- Lifetime Warranty

WWW.MILITARYMOUNT.COM

National Products, Inc. | Address: 8410 Dallas Ave. S., Seattle, WA 98108
Phone: (206) 763-8361 | Fax: (206) 763-9615
Website: www.ram-mount.com | Email: sales@ram-mount.com

AUSA Membership Benefits*

Bank of America, N.A.:
AUSA Bank Card
Start receiving great rewards and show your support for AUSA. Call 866-438-6262.

Institute of Land Warfare:
ILW offers writing programs; conducts conferences and symposia; publishes essays, Defense Reports, newsletters; and provides research on defense issues. Call 800-336-4570, ext. 4630 for details.

AUSA Mastercare Group Insurance Plans:
- Active Duty & Retiree TRICARE Supplement
- Accidental Death and Dismemberment Plan
- 10-Year Level Term Life Insurance Plan
- Group Term Life Insurance Plan
- Short-Term Recovery Plan
- Long Term Care Plan

Call 800-882-5707 for more information.

Dental and Vision Discount Plans:
Discounts offered to AUSA members on dental services and vision exams. Call 800-290-0523.

This plan is not available in the states of MT and VT.

Emergency Assistance Plus:
If you or a family member gets injured or sick while on travel, this plan will provide medical assistance, bring a medical specialist or loved one to your side and much more. Call 888-633-6450 for more information.

Government Vacation Rewards:
AUSA now offers its members discounts on cruises, resorts and tour providers. Call 866-871-9181.

GEICO Insurance – Auto, Home, Condo/Renters, and Boat:
In states where available, a special member discount may apply. Call 800-861-8380.

Apple Member Purchase Program:
Apple Computers offers AUSA members a substantial savings on its computers. Call 800-MY-APPLE and mention you are a member of AUSA.

Book Program:
Members receive discounts on selected military books.

Army Times/Federal Times:
Subscription discounts on Army Times/Federal Times. Call 800-368-5718.

Dell Member Purchase Program:
AUSA members can now receive discounts on Dell PCs. Call 800-695-8133 for more information.

AUSA Career Center:
AUSA members can now post their resumes and employers can advertise any new openings they have. Visit our Web site and go to the Resources drop-down, then Career Center.

University of Maryland University College (UMUC):
University of Maryland University College (UMUC) is pleased to offer undergraduate and graduate study programs to AUSA members worldwide. For some program participants, a discounted tuition rate will apply.

Armed Forces Services Corporation:
AFSC guides you through the details on military entitlements for your retirement and survivor planning/assistance for your spouse. Call or e-mail: 888-237-2872, info@AFSC-USA.com.

Choice Hotels International®:
AUSA members can receive discounts on hotel rooms at the following hotels.

- Comfort Inn®
- Comfort Suites®
- Quality®
- Sleep Inn®
- Clarion®
- Cambria Suites®
- MainStay Suites®
- Suburban Extended Stay Hotel®
- Econo Lodge®
- Rodeway Inn®

Call 800-258-2847 and use the code 00800700.

Car Rental Program:
Use the reservation codes on the back of your membership card and save at:

• AVIS	800-331-1441	• Hertz	800-654-6511
• Budget	800-455-2848	• National	800-Car-Rent
• Alamo	800-354-2322 *(rental for under age 25 available)*		

Publications:
- *ARMY* Magazine every month, including the October *ARMY Green Book*.
- *AUSA NEWS* every month.

* **Member discounts and services are subject to change.**

For more detailed information, visit Members Only Benefits and Services at www.ausa.org
or call Member Support at 855-246-6269 / 703-841-4300

Army Casualties in Afghanistan

The following U.S. Army soldiers were reported killed supporting Operation Enduring Freedom from March 1 to March 31, 2012. All names have been released through the Department of Defense; families have been notified.

SPC Edward J. Acosta, 21
SSG Jordan L. Bear, 25
SGT Daniel J. Brown, 27
PFC Johnathon F. Davis, 20
SSG Jesse J. Grindey, 30
CPT Aaron D. Istre, 37
SGT Jamie D. Jarboe, 27
PFC Payton A. Jones, 19
2LT Clovis T. Ray, 34
SPC Daquane D. Rivers, 21
SPC David W. Taylor, 20
SPC Dennis P. Weichel Jr., 29
SGT William R. Wilson III, 27

freestyle swimming, a three-kilometer cross-country run and show jumping—was especially demanding for CPT Kelly: In between events she nursed her new daughter. She credits the Army for keeping her in the WCAP through her pregnancy and allowing her to return to training after the birth. An Olympic qualifier in 2008, CPT Kelly was deployed to Iraq from February through December 2009.

Big Red 1 Aids Aviation. Soldiers from the 1st Attack Reconnaissance Battalion, 1st Aviation Regiment, Combat Aviation Brigade, 1st Infantry Division, are helping the Army test Apache and Gray Eagle platforms in the skies above the National Training Center at Fort Irwin, Calif., this year. The goal is to ensure that the two platforms meet the key performance parameters and capability requirements the Army determined for them.

From March through mid-April, more than 100 pilots and ground soldiers from the division's Company C flew the Apache Block III as part of the aircraft's initial operations testing and experimentation. The pilots flew a variety of missions from deep attack and close combat to unconventional operations, averaging 12 flight hours per week. In addition, they sought new ways to use the increased capabilities of the Block III helicopter.

While soldiers from Company C verified the speed and payload capabilities of the Block III, soldiers from Company F were training at Edwards Air Force Base to the southwest. They will begin the same sort of testing on the Gray Eagle Unmanned Aerial System later this year.

USMA's Rodriguez Awarded. In March, U.S. Military Academy linebacker cadet Andrew Rodriguez received the Amateur Athletic Union's 2011 James E. Sullivan Award, which annually honors the outstanding amateur athlete in the United States. The award, first presented in 1930, is based on the qualities of character, leadership and sportsmanship.

Rodriguez is the sixth football player to receive the Sullivan Award and the third West Point cadet. Felix (Doc) Blanchard was the first cadet and first football player to win the award, in 1945; cadet Y. Arnold Tucker won the award the following year.

An Academic All-American, Rodriguez also received the National Football Foundation's William V. Campbell Trophy, recognizing his combined academic success, football performance and community leadership, in December. He is the son of GEN David M. Rodriguez, commander of U.S. Army Forces Command, and his wife, Ginny. Following graduation this month, Rodriguez is slated to begin infantry training at Fort Benning, Ga., and then report to his first duty station in Vicenza, Italy.

RSLSP Deadline Extended. The deadline for eligible servicemembers, veterans and their beneficiaries to apply for Retroactive Stop Loss Special Pay (RSLSP) has been extended to October 21, 2012. RSLSP was established to compensate for the hardships military members encountered when their service was involuntarily extended under Stop Loss authority between September 11, 2001, and September 30, 2009.

Eligible members or their beneficiaries may submit claims to their respective branch of military service in order to receive the benefit of $500 for each full or partial month served in a Stop Loss status.

The services estimated 145,000 servicemembers, veterans and beneficiaries were eligible for the benefit when RSLSP began on October 21, 2009. Some of those qualified have not yet applied.

For more information or to apply for the pay, go to http://www.defense.gov/stoploss.

Testing Performance. Researchers at the U.S. Army Natick Soldier Systems Center (NSSC), Mass., are conducting studies to come up with measurements of performance that represent tasks soldiers must actually accomplish in performance of their duties.

The Army Physical Fitness Test, often used as a measure of performance, consists of sit-ups, push-ups and a two-mile run—specific feats uncalled for in combat. The Military Performance Division of the U.S. Army Research Institute of Environmental Medicine at NSSC is looking at alternative tests to find the ones most reliable, repeatable and relevant to functions soldiers must actually perform.

One test battery, the grenade throw, required soldiers to lob inert grenades toward a target 30 meters away. Other tests included a running long jump while wearing a helmet and vest, a box lift and a two-mile ruck march while wearing full gear.

NSSC also conducts laboratory tests of physical fitness to determine how those measurements correlate with performance tests. Results will be compared over a period of time to determine their reliability.

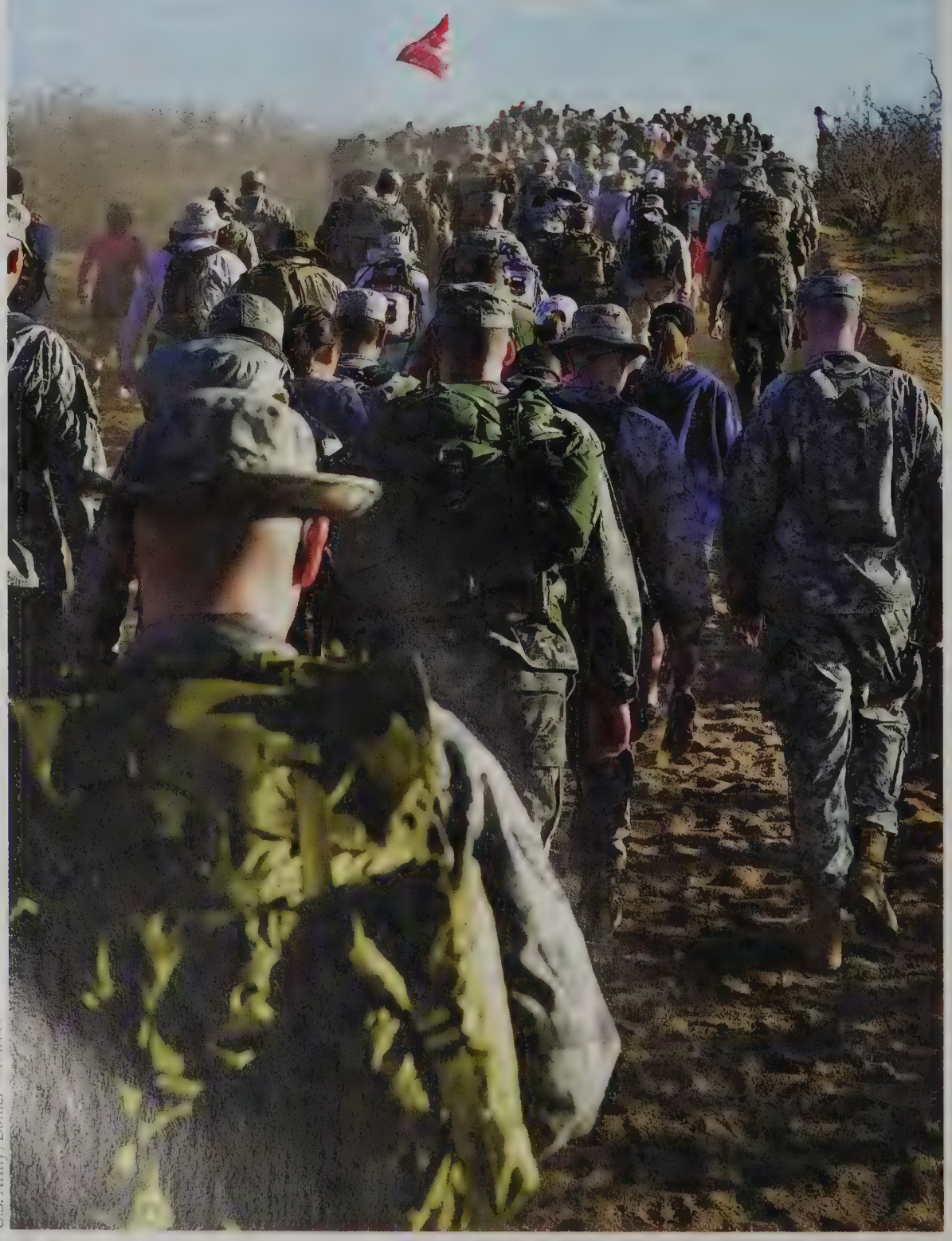
Expanded Drug Testing. Beginning this month, the Army is expanding testing of soldiers for unauthorized

use of prescription drugs, starting with hydrocodone and hydromorphone, two painkillers that are widely used because they are found in Vicodin and other brand-name drugs. The Army plans to further expand and increase its drug-testing capabilities in the months ahead.

Figures in the *Army 2020 Generating Health and Discipline in the Force Ahead of the Strategic Reset, Report 2012*, released in January (also known as the Army Gold Book) indicate the seriousness of the prescription drug problem among civilians and the dangers the medicines pose. Drug-induced deaths, including those from prescription medications, have risen steadily, outnumbering deaths from firearms or suicides in fiscal year (FY) 2004 and vehicle accidents in FY 2009. Fatal poisonings from prescription painkillers alone have more than tripled since 1999.

The Army currently tests for illegal substances and began testing for oxycodone and oyxmorphone about four years ago. Army commanders are given much leeway and are allowed to randomly test at least 100 percent of their end strength every year.

Bataan Remembered. *Participants in the 23rd Annual Bataan Memorial Death March begin their trek on White Sands Missile Range, N.M., in late March. The event included a full marathon and a 15.2-mile honorary march. Sixteen survivors of the 1942 march attended.*



U.S. Army/Daniel [illegible]

For more information about the Army Substance Abuse Program, visit http://acsap.army.mil/sso/pages/index.jsp. The Army Gold Book is online at http://usarmy.vo.llnwd.net/e2/c/downloads/232541.pdf.

Army Partners on Energy. The Army, partnering with industry for up to $7 billion dollars in renewable energy sources, has issued a draft request for proposal (RFP) that could allow numerous projects to begin across the nation.

The $7 billion will be spent for up to 30 years to purchase energy that is produced from renewable energy plants constructed, owned and operated by contractors. No awards will be made from the draft, but the Army will use industry feedback to develop the final RFP.

Katharine Hammack, Assistant Secretary of the Army for Installations, Energy & Environment, told reporters at a media roundtable in March that the investment will help the Army reach its goal of having one-quarter of the Army's energy come from renewable sources by 2025.

The Army currently uses 2.5 million megawatt hours each year.

R&R Flights End at DFW. The last Rest and Recuperation (R&R) flight to use the Dallas-Fort Worth (DFW), Texas, airport as a hub for troops returning home on leave from theater landed in March, when the Army officially closed the DFW Personnel Assistance Point (PAP) because of an expected decrease in soldiers traveling for R&R. The USO facility at DFW will remain open to serve individuals and small groups, but the Army has consolidated operations with the Atlanta PAP, where about 60 percent of troops returning on R&R fly into Hartsfield-Jackson Atlanta International Airport.

Fewer troops will be traveling on R&R because of the Army's recent reduction of deployment time to nine months, which does not allow for mid-tour leave, as well as the end of operations in Iraq and the forthcoming drawdown in Afghanistan. ★

MARK 4™ ER/T® 6.5-20x M5 AUTO-LOCKING ADJUSTMENT
LONG-RANGE SNIPER OPTIC

ITAR

MARK 8™ COBSS™ 1.1-8x
DESIGNATED MARKSMAN AND BATTLE RIFLE OPTIC

ITAR

MARK 4™ HAMR™ FIXED 4x – REFLEX RED DOT
SERVICE RIFLE AND CARBINE OPTIC

DUAL-USE
HUNTING / SHOOTING / TACTICAL

SOFIC BOOTH # 1334
NDIA JOINT ARMAMENTS CONFERENCE BOOTH # 321

BUILT FOR BATTLE

THE US MILITARY'S NEXT-GENERATION LEUPOLD TACTICAL OPTICS ARE NOW IN SERVICE ON TODAY'S BATTLEFIELD. DESIGNED, ENGINEERED, MACHINED, ASSEMBLED, AND RELENTLESSLY TESTED IN OREGON, USA.

INSIST ON MARK 4™ AND MARK 8™ MOUNTING SYSTEMS FOR THE MOST DEMANDING APPLICATIONS.

LEUPOLD
TACTICAL OPTICS

AVAILABLE NOW @ 1-800-LEUPOLD #4
TACTICALOPTICS@LEUPOLD.COM | WWW.LEUPOLD.COM
PORTLAND, OREGON, U.S.A.

Partner Capacity Building And U.S. Enabling Capabilities

By LTG James M. Dubik
U.S. Army retired

The analysis of the partner capacity-building mission has so far focused on identifying which capacities our current and potential partners may need and how the United States would go about building those capacities. There is a third perspective, however: use. Finishing this aspect of mission analysis is important because it will reveal yet undiscussed force structure shortcomings.

Partner capacity is built to be used in at least three main categories of potential scenarios: independent use—no U.S. involvement; semi-independent use—with the United States providing one or more enabling capabilities during the operation; and dependent use—partners contributing to a larger coalition effort that itself is supported largely or solely by the United States. There will be gradients among these three, but the categories suffice for the purposes of analysis, planning and identifying force structure implications.

The first category includes the United States providing a mature ally with equipment it needs and one-time training in the use and employment of that equipment. The mature ally then employs the new capability independently of any other U.S. involvement. This category of capacity building involves America's industrial capacity, a willingness to provide what we make to our partner (whether for a fee or not), an ability to train that partner and the partner's ability to benefit from that training.

While not a perfect example, U.S. support to the British during the 1982 Falklands War is illustrative. America provided air-to-air and surface-to-air missiles, aircraft fuel, and other military equipment for British use. The United States also sold 12 F-4 fighters to the British after the war. Little training was required; the U.K. employed this equipment independently.

Other enabling assistance the United States provided during the Falklands War falls into the second category. In the areas of intelligence sharing and use of our Ascension Island base, the British were semi-independent in that the United States provided these enabling capabilities throughout the campaign. U.S. Special Forces' support to Uganda's fight against the Lord's Resistance Army is another example of the semi-independent category. Recent U.S. support to the NATO operation in Libya is a third. Finally, in a still-emerging scenario, U.S. support of the Arab League in Syria will likely be one more example of the semi-independent category.

The final category of enabling capabilities concerns partners contributing to a larger coalition effort. Haiti, Bosnia, Kosovo, Iraq and Afghanistan all come to mind as examples of dependent operations. In each of the previous examples, whether conducted by NATO or by a more ad hoc coalition sanctioned by the United Nations, some allies or partners—not all—were quite dependent upon one or more U.S. enabling capabilities.

All three categories of enabling operations share one essential characteristic: They demonstrate that the current method for determining U.S. military capabilities is deficient. Presently, American military enabling capability is determined by what is necessary to support U.S. operations. Regardless of the particular force generation model employed, the general method is the same: Determine what U.S. air, land and sea forces would be necessary to succeed in the operations envisioned, then derive the intelligence, command and control, fires, logistics, and other support capabilities needed to enable those forces. This method rests upon an important assumption: that the set of enabling capabilities derived from this approach would be large enough to handle any other lesser contingency that may arise. That assumption has been invalid for at least 15 years, and will remain invalid in a future that will likely include more semi-independent and dependent operations rather than fewer.

Since 2003, the United States has been conducting multiple dependent and semi-independent operations simultaneously. Ask any geographic combatant commander or ambassador whether he has had adequate enabler support for those operations and he will tell you no. Perhaps the exceptions would be Iraq during the 2007–08 surge, selected counterterrorist special operations and Afghanistan in the last 18 months. These exceptions prove the rule.

In the quest for economy, U.S. strategic leaders seem to have forgotten or ignored an important lesson of the last 10 years of war: America's enabling capabilities are more in demand, not less. A closer look at four of the more important enabling capabilities seems in order.

Intelligence

Good intelligence—about one's opponent as well as about one's own forces—is essential for all operations. Few nations have sufficient intelligence capability, however. U.S. intelligence support is often the first item requested in any semi-independent or dependent operation. Certainly, the United States should seek to expand this capacity in its allies and potential partners. Until then, American intelligence support will be in high demand.

Intelligence support is not just a mat-

ter of platforms that collect information. It also involves an analytic capability that translates information into intelligence, a distribution system to move the intelligence to the variety of places it is needed for making decisions and taking action, and a feedback methodology that supplies updated information to be analyzed.

These other aspects of intelligence support often involve embedding hardware, teams of people, and connectivity with partner units or headquarters on the ground. The United States might be willing to share intelligence, but in many situations sharing the sources and methods would not be prudent, hence embedding U.S. personnel and equipment within partner organizations.

Command and Control

Many semi-independent and dependent operations are quite large in terms of geography and numbers of troops involved. Few nations have the ability to achieve sufficient unity of effort and coherency in action—the purposes of a command-and-control system—required for large-scope operations.

A command-and-control system requires a sufficiently common or interoperable suite of communications means throughout the network, but command and control also requires seasoned leaders as commanders and on staff at each echelon and each geographic location. Commonly, in both semi-independent and dependent operations, even when the participating forces have sufficient leaders, staffs are often not experienced in large-scale operations, and partner communication suites are either immature or outdated. In such cases, as with the intelligence capability, "plugs" of augmenting equipment and trained staff are required.

Again, this might be a capacity that the United States seeks to expand in its allies and build in potential partners, but such capacity will be years in the building.

Fires

Current operations rarely need massed fires. Rather, precision is the norm. Precise fires, however—whether air-to-ground or ground-to-ground—are *not* ubiquitous. The mistaken belief is that providing a precision-fire capability in a semi-independent or dependent operation is a simple matter of technology—providing armed UAVs, armed helicopters or fighter-bomber aircraft. This is not true.

In most operations opposing forces are closely entangled, with enemy elements intentionally operating amid innocent civilians and protected facilities like hospitals and religious buildings. Using precision fires under these situations requires trained on-the-ground observers and controllers. Trained observer/controllers are also needed when air or ground fires are used in support of mobile friendly operations. In addition, to take maximum advantage of either air- or ground-delivered precision fires requires an extensive and reliable air-to-ground and ground-to-ground communications system—part of the overall suite of command-and-control communications means.

As before, precision fires might be a

capacity that the United States seeks to expand in its allies and build in potential partners, but such capacity will be years in the making. In the meantime, the demand will be high for this capability in most semi-independent and dependent operations.

Logistics

Logistical operations include providing food, water, clothing, fuel and lubricants, construction materials, munitions and explosives, personal items, major end items like vehicles and aircraft, medical supplies and facilities, repair parts and maintenance facilities, salvage operations, public works, and warehouses and depots. Logistics provides these things for air, naval and ground forces, for whatever partners are in need, and in many cases for reconstruction and humanitarian requirements.

Logistics operations require their own command-and-control systems, a distribution system to get supplies into theater and one to move supplies around in the theater, and a means to protect supplies in depots and warehouses as well as in transit. Finally, depending upon the nature of the semi-independent or dependent operation, these operations will likely include joint (air, ground and sea) logistics assets.

Providing for the logistical support is a major operation in itself. A large-scale operation (about 450,000) would be like sustaining the populations of Kansas City, Mo., or Long Beach, Calif.; mid-size operations—about 300,000—are like supporting the population of Pittsburgh, Pa., or Corpus Christi, Texas; smaller operations supporting about 140,000 would be like providing for the populations of Hartford, Conn., or Columbia, S.C. Normal conditions associated with a contingency environment—being attacked and having limited public works, weak or nonexistent air and sea traffic-control systems, and immature distribution infrastructure, for example—further complicate the logistics operations.

As is the case with the other enabling capabilities, few nations have the capacity to sustain these kinds of large, geographically dispersed operations. Similarly, providing logistics is usually much more involved than providing items of supply; embedding plugs throughout the strategic, operational and tactical logistics systems is often required. Finally, in the area of logistics not only are there few nations that have this capacity, but also America's overreliance on contract logistics support might restrict the extent to which the United States could support allies or partners.

There are other enabling capabilities, but these four make the essential point: Unless enabling capabilities gets greater scrutiny as an essential element of building partner capacity, the U.S. armed forces run the risk of having exactly the wrong force needed for the strategic environment many envision. Partner capacity is a three-legged stool: identifying deficiencies, building capacities and providing enabling capabilities.

Undoubtedly America cannot afford all that might be required. Taking pru-

dent risk will be necessary. Like it or not, though, America's enabling capabilities will be in more demand in the coming years, not less; U.S. enabling capabilities are already too small; and the overwhelming drive for reductions and efficiencies is likely to ignore enabler analysis and the associated force structure requirements as part of the "build partner capacity" mission. □

__LTG James M. Dubik__, USA Ret., is a former commander of Multi-National Security Transition Command-Iraq and a senior fellow of AUSA's Institute of Land Warfare.

Rebalancing May Require Reshaping Dangerous Habits

By Richard Hart Sinnreich

Recently I received a disturbing email from a retired friend and former colleague who continues to work on military projects. As part of one such project, he found himself involved in building a war game focused on future capability requirements. The scenario visualized air-landing a light armored force to seize and hold an enemy airfield some distance away.

The senior officer acting as the game's friendly force commander, a veteran of Iraq and Afghanistan, declined to approve the proposed air assault. His objection, in my friend's words, was that, should the air-landed force suffer casualties en route to its objective, it would immediately have to halt its advance, assume the defensive, wait for help, work to achieve full situational understanding, and fully sort things out in terms of killed and wounded.

My friend pointed out that the hypothesized mission was a major combat operation, not counterinsurgency (COIN), and asked whether that didn't alter the commander's priorities. To which he replied, in effect, No, that's not the way we do it now. We wouldn't fight through to the objective. If we have wounded, we have to do everything possible to save their lives. Doesn't matter whether it's COIN or major combat operations. If a wounded soldier dies, commanders will be held responsible.

In his own view and that of his peers, he added, the Army's culture will no longer permit high casualties. Saving the wounded trumps the mission.

Nor, apparently, is that viewpoint limited to officers. Another member of his team, a veteran senior NCO, agreed with his assessment.

A single anecdote doesn't a pattern make, but this one is of a piece with other reports of self-limiting practices adopted during the past decade, from restrictions on the use of close air support and artillery to avoiding close combat altogether where friendly or civilian casualties might result.

It's important to recognize that these practices reflect no lack of skill, courage and dedication on the part of uniformed personnel. On the contrary, they often impose heavier demands on all three.

Rather, they reflect societally and politically imposed priorities, the effect of which—if the attitudes reported by my friend's two war game colleagues in fact are as pervasive as they seem to believe—is to subvert the "mission first" motto with which combat leaders of earlier generations were imbued.

That this problem has arisen now should surprise no one. Political posturing notwithstanding, the reality is that a steadily declining number of Americans believe that our military engagements during the past decade have justified their costs in blood and treasure.

In response, Americans have adopted a sort of indiscriminate overprotectiveness that media hype tends only to aggravate. When every friendly or civilian casualty risks charges of error or neglect, and when every such charge invites political attack and/or public obloquy, it isn't surprising that leaders in the field respond by seeking to minimize such penalties, even at the price of mission avoidance or failure.

Nor is the problem limited to the U.S. military. Discussing the attitudes and habits that helped produce a near-debacle during Israel's 2006 Lebanon incursion against Hezbollah, Israel's postconflict Winograd Commission noted, "On the one hand, the belief that the terrorist and semi-military organizations do not constitute real danger to Israel and, on the other hand, the increasing influence of the interna-

AUSA FAX NUMBERS

(703) 236-2929	**(703) 841-3505**	**(703) 841-1050**	**(703) 236-2927**	**(703) 236-2926**
INSTITUTE OF LAND WARFARE, SENIOR FELLOWS	ARMY MAGAZINE, AUSA NEWS, COMMUNICATIONS	EXECUTIVE OFFICE	REGIONAL ACTIVITIES, NCO/SOLDIER PROGRAMS	EDUCATION, FAMILY PROGRAMS
(703) 243-2589	**(703) 841-1442**	**(703) 841-5101**	**(703) 525-9039**	**(703) 841-7570**
INDUSTRY AFFAIRS	ADMINISTRATIVE SERVICES	INFORMATION TECHNOLOGY	FINANCE, ACCOUNTING, GOVERNMENT AFFAIRS	MARKETING, ADVERTISING, INSURANCE

tional law and legal rulings whose effect can limit the use of weapons and the setting of goals for assault."

Indeed, comments one scholar, "Risk aversion has become central to contemporary Western ways of war. Western governments seem relatively willing to send soldiers to war, but extremely unwilling to have those soldiers die."

Keeping a lid on friendly and civilian fatalities even at some cost in mission accomplishment is one thing when the mission in question is of limited or dubious strategic consequence. However, it's another matter altogether when the success of the mission really counts—when the safety of the nation or of a vital ally or interest may depend on it. And of course, the damage only compounds when the enemy suffers from no such scruples.

The problem is that, once internalized by a military force, attitudes and habits that elevate caution and safety over audacity and the willingness to tolerate sacrifice can be hard to break. What's even worse, in the long run they're apt to be self-defeating, at best inviting deferred and more expensive victory, and at worst outright defeat.

Today's senior U.S. military leaders are rightly concerned to rebalance a military compelled for more than a decade to behave more like a police SWAT team than a war-winning instrument, but if the attitudes registered by my friend's colleagues accurately reflect those of our military in its entirety, rebalancing may involve a good deal more than just replacing worn-out equipment and recovering too long-neglected technical and tactical skills. □

***Richard Hart Sinnreich** writes regularly about military affairs for* The Lawton *(Okla.)* Sunday Constitution. *This article originally appeared in the February 19, 2012,* Lawton Constitution *and is reprinted by permission of the author.*

Using Technology to Train America's Decisive Force

By LTG David G. Perkins, COL Robert (Pat) White and **CPT Nathan K. Finney**

As the Army reshapes its force structure and begins consolidating its operational experience after a decade of war, the Army Chief of Staff is focusing on maintaining and then enhancing the quality and readiness of Army forces. An effective way to do this is through integration of our training domains (operational, institutional and self-development) to include lessons learned and by encouraging career and lifelong learning.

Currently available technology and emerging training capabilities support individual and collective training at home station, link to Army Centers of Excellence (CoEs) and institutions, and conduct multi-echelon and con-

current training in relevant scenarios that potentially complement and support live training at the combat training centers. This requires increased collaboration with industry, academia and technology leaders to drive the development of integrated training capabilities as well as provide technology that integrates training and education and addresses innovative ways to provide training in the future.

According to the Army's posture statement for 2012: "Today's Soldiers have achieved a level of professionalism, combat experience and civil and military expertise that is an invaluable national asset." To exploit this experience as well as ensure that the Army retains quality leaders, soldiers and Army civilians, Army leaders must provide realistic and tailored training—from individual soldiers to units, across echelons, and from home

SMA William O. Wooldridge, USA Ret., 1922–2012

The first Sergeant Major of the Army, William O. Wooldridge, died March 5 from a lung infection at Beaumont Army Medical Center at Fort Bliss, Texas. He was 89.

SMA Wooldridge had been serving for a year as 1st Infantry Division sergeant major in the Republic of Vietnam when he was chosen from among 4,700 candidates to fill the new position created by Army Chief of Staff GEN Harold K. Johnson. SMA Wooldridge was sworn in on July 11, 1966. For the next two years as the top enlisted advisor to the Chief of Staff, he developed the position, visiting soldiers on installations and in combat zones until his term ended in August 1968.

"His legacy lives on in the United States Army Sergeants Major Academy, the centralized NCO promotion system and our professional NCO Corps," said current SMA Raymond F. Chandler, who added, "He was an innovator, a true inspiration to all soldiers and the epitome of a professional warrior."

SMA Wooldridge was born in Shawnee, Okla., and grew up on a farm in Texas. He enlisted in the Army in 1940 at age 18, having been turned away two years before. In a 2001 Center of Military History interview held at his home near Fort Bliss, SMA Wooldridge explained why he joined. "I had this one thing on my mind," he said. "I wanted to wear a soldier uniform. I wanted to be a soldier, and I wanted to get the hell out of Brown County, Texas." Which he did, in a career that took him around the world and spanned three wars and 14 campaigns.

SMA Wooldridge served with the 1st Infantry Division in the North Africa and Sicily Campaigns and the Normandy D-Day landings in 1944. That fall he was awarded the Silver Star for gallantry at the battle for Aachen, Germany; he received a second Silver Star while serving as a platoon sergeant during the Battle of the Bulge in December. After returning to the United States in May 1945, he was assigned to numerous posts, among them Post Headquarters at Schofield Barracks, Hawaii, and Headquarters, Eighth U.S. Army, where he was promoted to first sergeant.

In January 1963, he became sergeant major of the 1st Brigade, 1st Infantry Division at Fort Riley, Kan. He was appointed division sergeant major in June 1965, deployed to Vietnam with the division in August and served there until selected as the first Sergeant Major of the Army. When his term ended, SMA Wooldridge returned to Vietnam as the sergeant major of the Military Assistance Command-Vietnam. He was the only Sergeant Major of the Army to return to field duty after serving in the top enlisted position. On returning to the United States, SMA Wooldridge was assigned to White Sands Missile Range, N.M., in the fall of 1969. After 30 years and 10 months of service, he retired in 1972 and lived in Santa Teresa, N.M.

Among SMA Wooldridge's awards and decorations were the Silver Star (with Oak Leaf Cluster), Legion of Merit (with Oak Leaf Cluster), Bronze Star Medal, Purple Heart, and Air Medal (with 5 Oak Leaf Clusters). He was also authorized to wear unit decorations from the United Kingdom, France, Belgium and the Republic of Vietnam.

SMA Wooldridge lived by the words he wrote in *Army Digest* in 1967: "Take care of each man as though he were your own brother—he is." After his retirement, he attended Army events and offered his support to the SMAs who followed him. "He loved soldiers," said SMA Chandler. "Even when he was sick, he was worried about that thing he loved so much—the Army and its soldiers."

SMA Wooldridge was remembered at a memorial service at the U.S. Sergeants Major Academy at Fort Bliss in March. After the ceremony, command sergeants major walked behind a horse-drawn caisson carrying the casket to Fort Bliss National Cemetery, where SMA Wooldridge was interred with military honors.

Survivors include his wife, Patty, and four children. □

station to the combat training centers. An integrated training system that incorporates every element, including CoEs and the institution, is crucial to the readiness of our forces.

The bedrock of the future training system will be scalable and tailorable training support that provides the desired capabilities at the point of need. The key element is a realistic, persistent and challenging replication of the expected operational environment, no matter the source from which soldiers are training—a resource the Army calls the Integrated Training Environment (ITE). When implemented, the ITE provides commanders the ability to manage their unit's training and to conduct training so realistic that they will not be able to tell if the information on their mission command systems is real or simulated. This will allow commanders to train multiple scenarios under various conditions, using a flexible, progressive training methodology.

Essential to the ITE and the future training system is its use of a distributed, blended learning environment with a heavy reliance on live, virtual, constructive and gaming (LVCG) training enablers. Live tools involve humans operating real systems in the live world—think instrumented force-on-force maneuver training at the National Training Center. Virtual tools—such as the Common Driver Trainer or Unit Conduct of Fire Trainer—involve humans operating simulated systems. Constructive tools, such as the wargaming models Warfighters' Simulation or Joint Conflict and Tactical Simulation, involve simulated humans operating simulated systems. Finally, gaming tools involve using desktop computer gaming technology—think first-person shooter or thinker games such as the Army's Virtual Battlespace 2 or UrbanSim. LVCG capabilities will be used to strengthen one of the pillars of the Army's readiness: the integration of our active and reserve components. There should be little doubt that the reserve component will remain the nation's operational reserve, and we should train them as such. Both the active and reserve components must have the capabilities they need to train their units to the appropriate level of proficiency.

One way to get at this is to provide training at U.S. Army Reserve regional training support centers, where there is a smaller density of units. While this works well for the Reserve, these facilities will be available to the active Army and National Guard as well. All components will be able to train their battalion and brigade staffs to proficiency, while also being able to train reserve platoons and active companies to live-fire proficiency. To accomplish this, we will integrate multipurpose range complexes, situational training exercise lanes, simulations, gaming, home-station instrumentation training and virtual simulations such as the close combat tactical trainer. All components will eventually be supported by the National Simulation Center at Fort Leavenworth, Kan., or a regional simulation center in Europe or the Pacific. Acquiring these capabilities requires increased support and collaboration with the technology and training industries.

Using technology to integrate and increase the effectiveness of training is not a one-time event. We must use technology to enable training and education throughout a soldier's entire career. Examples of this are the systems we have put in place to manage and move data tied to training management, such as the Army Training Network and Army Training Information Systems.

According to an article by Cassandra Yardeni in the March 2010 *NCO Journal*, the Army Training Network is a digital, Web-based platform that "blends together doctrine, how-to procedures, training products, training solutions and collaboration tools for the training community." This provides soldiers a one-stop shop where they can find every tool they need to develop, execute and assess training as well as provide feedback. Supporting this, Army Training Information Systems enable soldiers and leaders to employ state-of-the-art information technologies in a fully integrated and networked training support system to provide realistic, timely, user-responsive and cost-effective training for units and individuals. This includes training management support as well as comprehensive, configurable and content-rich training products and media. These systems support the entire training domain—from tools to training development and training methods—throughout a soldier's career.

Technology-based training systems not only make training more accessible but also save both time and money by allowing greater repetitions or cycles of training events that would be otherwise resource-prohibitive.

The close collaboration and cooperation of the Army, academia and industry must continue. Developing the leaders, soldiers and Army civilians for the nation's decisive force will take comprehensive training and education balanced with experience. A decade of conflict has provided us the most experienced combat force in generations, and as we move beyond Iraq and Afghanistan we will have to increasingly rely on realistic and challenging training to maintain the skills and knowledge we have gained. The most efficient and effective way to accomplish this is through the integration of live, virtual, constructive and gaming technologies for individual and collective multi-echelon and concurrent training, from squad to division/joint task force levels. Harnessing these technologies will help the Army develop agile, adaptive and versatile leaders for tomorrow. □

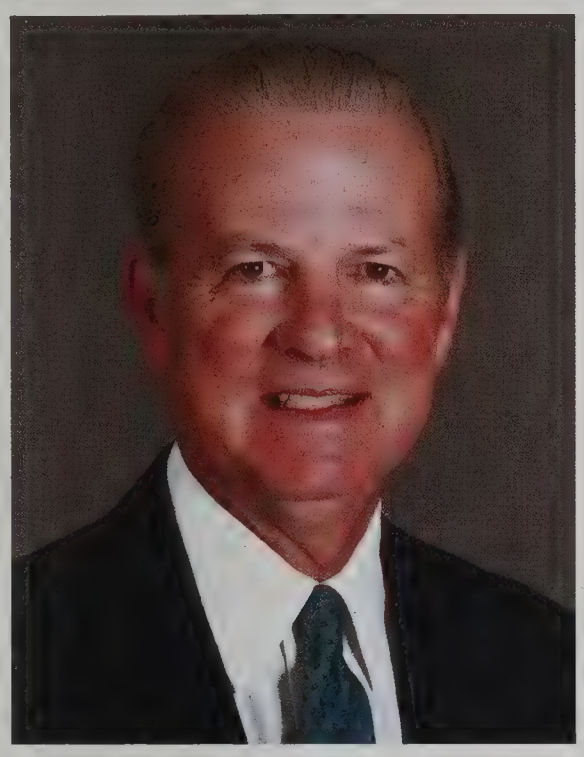
LTG David G. Perkins *is the commander, U.S. Army Combined Arms Center and Fort Leavenworth, Kan. Previously he commanded the 4th Infantry Division and was the U.S. Division-North commander in northern Iraq.* ***COL Robert (Pat) White*** *is the deputy commander for training at the Combined Arms Center. Previously he commanded the 2nd Brigade, 1st Armored Division in Iraq and served as the executive officer for the commander of U.S. Army Training and Doctrine Command.* ***CPT Nathan K. Finney*** *is an Army strategist currently serving at the Combined Arms Center as the commanding general's speechwriter.*

James A. Baker III to Receive 2012 Marshall Medal

The Association of the United States Army has selected James A. Baker III, former Secretary of State, as the recipient of the 2012 George Catlett Marshall Medal. It is the highest honor the association bestows.

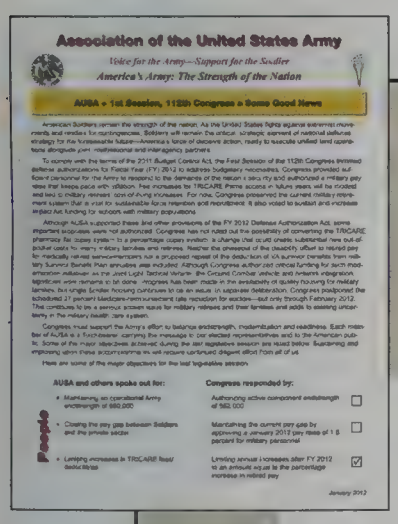
Awarded annually to an individual who has exhibited selfless service to the United States of America, the Marshall Medal will be presented to Baker by the AUSA council of Trustees in recognition of his contributions to the nation as a cabinet member, presidential advisor and strong supporter of national defense and the men and women of the armed forces. The presentation will take place on October 24 at the George Catlett Marshall Memorial Dinner, which is the final event of the three-day AUSA Annual Meeting and Exposition held at the Walter E. Washington Convention Center in Washington, D.C.

"As an exceptional patriot, who served his country during many of the world's and our nation's most volatile, challenging and complex times, Secretary Baker—with extraordinary and singular abilities, including uncommon dedication and diplomacy—is a true American icon who represents the best of public service and sacrifice to the nation," said AUSA President GEN Gordon R. Sullivan, USA Ret.



"Through his close collaboration with Presidents of the United States, cabinet members, members of Congress and foreign leaders, Secretary Baker continuously and courageously demonstrated how we as a nation can fully address the national and global challenges we have faced and are facing today. He is a great American and truly deserving of AUSA's highest award," GEN Sullivan added.

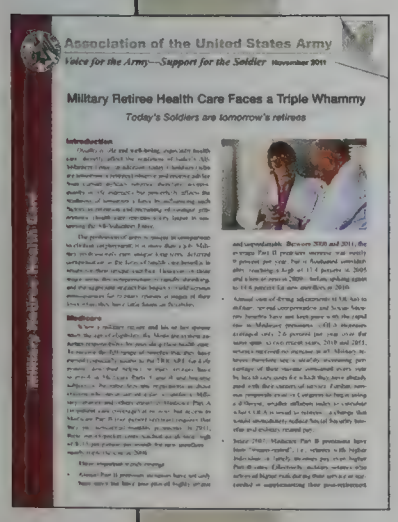
Born in Houston, Texas, Baker graduated from Princeton University in 1952 and then served for two years in the United States Marine Corps as a lieutenant. He later became a captain in the U.S. Marine Corps Reserve. After serving in the Marine Corps, Baker entered the University of Texas School of Law at Austin and received his J.D. with honors in 1957. He practiced law with the Houston firm of Andrews


Association of the United States Army

Voice for the Army—Support for the Soldier

America's Army: The Strength of the Nation

AUSA • 1st Session, 112th Congress • Some Good News


Association of the United States Army

Voice for the Army—Support for the Soldier November 2011

Military Retiree Health Care Faces a Triple Whammy

Today's Soldiers are tomorrow's retirees

Help AUSA continue to be the Voice for America's Army

The Institute of Land Warfare (ILW), the educational arm of AUSA, publishes papers and Torchbearers that educate the Administration, Congress and the general public on issues directly affecting America's Army and our Soldiers.

The printing of these papers costs money and ILW, as a non-profit, must depend on contributions. Help ILW continue to ensure that America has the strongest Army possible and that our Soldiers are taken care of.

For more information, please contact Millie Hurlbut at 703-907-2679 or mhurlbut@ausa.org.

THE INSTITUTE OF LAND WARFARE • AUSA •

and Kurth until entering public service in 1975.

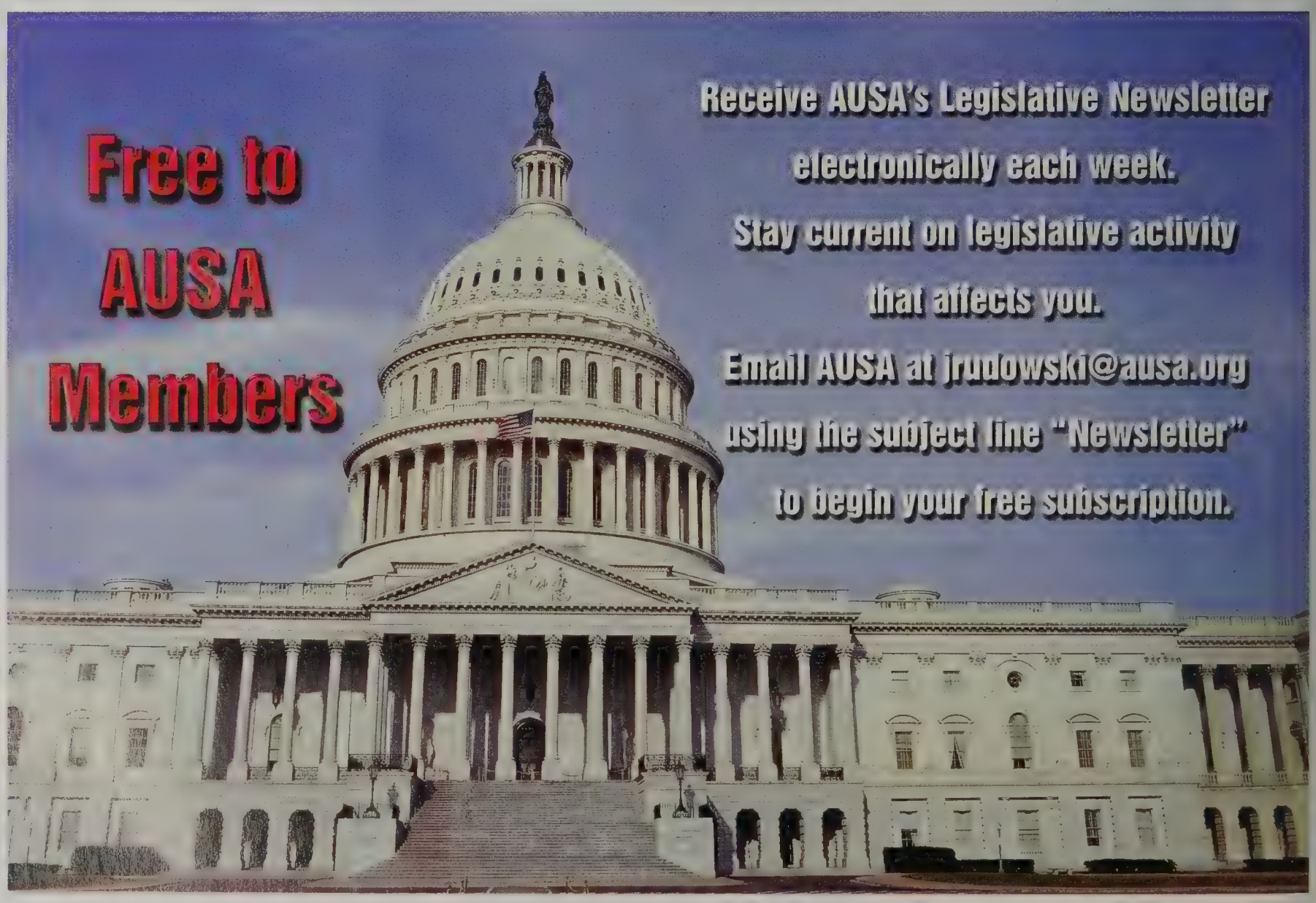
Baker has served in senior government positions under three U.S. Presidents beginning in 1975 as Under Secretary of Commerce to President Gerald Ford. From 1981 to 1985 he was White House Chief of Staff for President Ronald Reagan and then served under him as the 67th Secretary of the Treasury from 1985 to 1988. As the country's 61st Secretary of State from January 1989 through August 1992 under President George H.W. Bush, Baker traveled to 90 foreign countries to address the unprecedented opportunities and challenges facing this nation during the post-Cold War period. As a vigorous and outspoken opponent of chemical and biological weapons, he played a vital role in constructing the 34-nation alliance led by the United States in the Gulf War. In August 1992, Baker returned to the White House and served as chief of staff and senior counselor to President Bush until January 1993.

From 1997–2004 Baker served as the personal envoy of U.N. Secretary General Kofi Annan to search for a political solution to the conflict over Western Sahara. In 2005 he co-chaired the Federal Commission on Election

Reform with former President Jimmy Carter, and since 2006 he has served as a co-chair of the Iraq Study Group.

Currently a senior partner in the law firm of Baker Botts, Baker is also the honorary chairman of the James A. Baker III Institute for Public Policy, which he founded at Rice University in Houston. He also serves on the board of the Howard Hughes Medical Institute. Baker was awarded the Presidential Medal of Freedom in 1991. Other awards include Princeton University's Woodrow Wilson Award for Public Service, Harvard University's John F. Kennedy School of Government Award and the Department of State's Distinguished Service Award.

AUSA awards Baker the Marshall Medal in recognition of his decades of dedicated public service to the nation and his strong commitment to its defense and the men and women of the armed forces. "Secretary Baker's unparalleled accomplishments and his extraordinary political and diplomatic career—in the tradition of soldier-statesman GEN George Catlett Marshall—make him truly deserving of the Marshall Medal, and we at AUSA are proud to recognize him as the great American he is," GEN Sullivan concluded. □



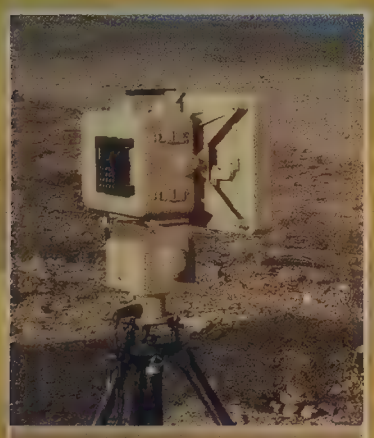
Ground surveillance radar that's fast and powerful with piercing accuracy.

Situational awareness is key to success. It takes sharp eyes to detect the slightest movements of threats, day or night, in environmentally diverse and challenging conditions. With the SR Hawk™ radar you will see all. Invented by SRC and manufactured by SRCTec, this state-of-the-art mobile ground surveillance radar:

- Provides detection of people to 10 km, vehicles to 30 km
- Is based on combat proven AN/PPS-5D
- Offers a light, compact and durable sensor package

It's good to know your adversaries.
It's even better to see them.

To find out more, visit **www.srcinc.com/SRHawk.**



SR Hawk™

Redefining possible.

SRC

Defense • Environment • Intelligence

© 2012 SRC, Inc. All rights reserved.

Fighting in the Clouds

The Network in Military

Today's operational environment is defined by rapid technological change—from the progression of commercial cellular and data networks to the ubiquitous presence of satellite communications. Potential adversaries acquire emerging commercial off-the-shelf technology and create threats that are "innovative, adaptive, globally connected ... and possess a wide range of old, adapted, and advanced technologies," according to U.S. Army Training and Doctrine Command's *Operational Environment 2009–2025.*

Operations

By BG Charles A. Flynn,
BG Wayne W. Grigsby Jr.
and
COL Jeff Witsken
U.S. Army retired

The global proliferation of technology has created highly networked societies, both socially and technologically, affecting not just the way adversaries fight but also their very cultures. They have evolved into highly distributed and networked threats with an increased ability to maneuver against us through both conventional and asymmetric means. In turn, this has created a situation in which a communication Network able to touch and link all members of a fighting force is central to not only our operations but also those of our adversaries. As we prepare for the future we must better understand cyberspace and the electromagnetic spectrum, and how our organizational culture supports and inhibits the building of a successful Network.

The Network as a Weapon

This article uses the word *network* in two ways: *networks* and the *Network*. Whereas *networks* consist of people working together to accomplish a mission, the *Network* is the technology used to connect and enhance human networks to achieve a desired objective. In other words, the Network is people enabled by technology with a shared purpose.

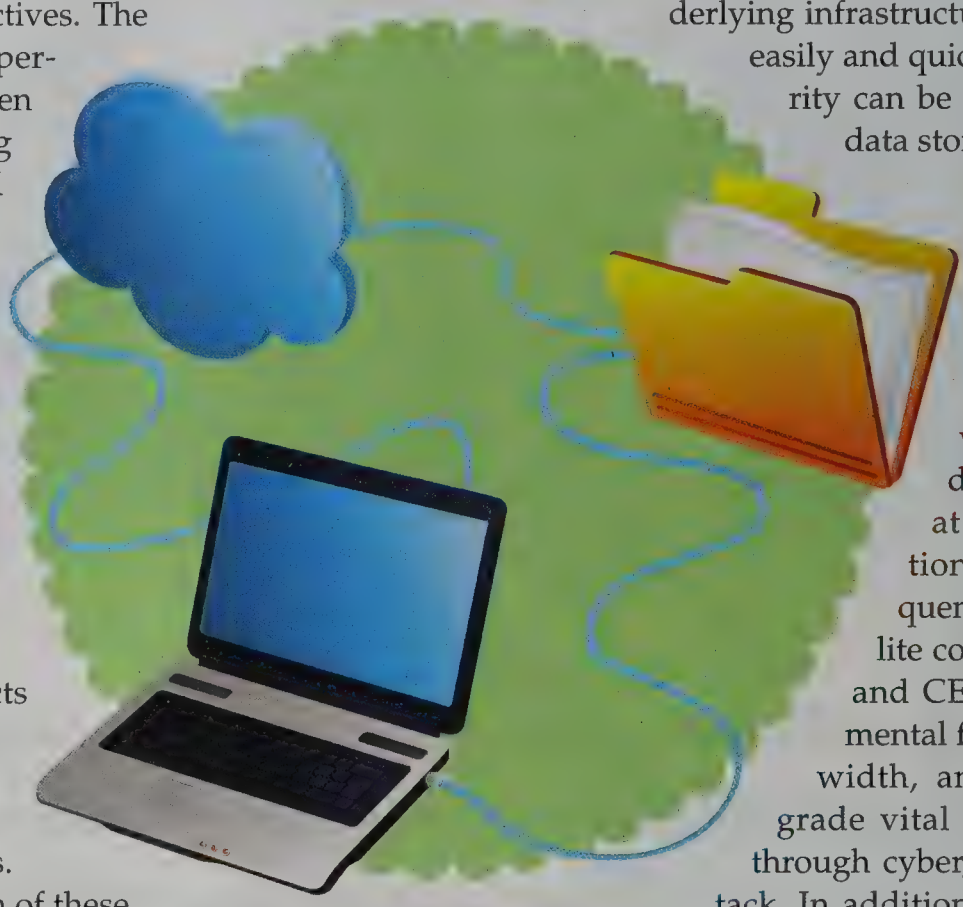
In today's operational environment the effective use of the Network is as powerful a

determinant of unit performance as the ability to fire ballistic weapons systems or maneuver forces. That said, the Army must consider the Network as a weapons system, and commanders and their staffs must also incorporate the Network into how we array our capabilities to achieve decisive outcomes.

To address this situation, the Army is developing the technological-human interface that is the Network to:

- Gain understanding of the operational environment from intelligence sources, partner agencies, and adjacent and subordinate units.
- Enable decisions through analysis of these sources.
- Coordinate, synchronize and execute efforts to achieve the desired operational objectives. The Network, however, cannot perform this role unless it is given the same attention in planning and execution that we afford other more traditional weapons systems.

Commanders must array and employ the Network in time, space and purpose to ensure the success of the overall operation, just as they array fires or logistics. With the Network, this array is not just physical but also accounts for the cyber-electromagnetic (CEM) aspects as a part of the overall understand/visualize/describe/direct/lead/assess role in the operations process. This includes an appreciation of these mediums as maneuver space—areas where positional advantage is possible—from the commander down to the newest private in the command post.



Fighting in the Clouds: Understanding the Network

From a technical perspective, the Network consists of five layers: platforms and sensors, applications, services, transport infrastructure and standards. Those employing the Network must understand these layers and how they are arrayed. As the Army seeks a resource-informed approach to an effective Network, the concept with the most efficiency and feasibility is "cloud computing."

Cloud computing relies on high bandwidth, with virtually no delay in the exchange of information between systems, that allows computing and data storage to be physically separate from the user. Physically separating devices from the services of the Network achieves several advantages. First, resources can be shared across a large pool of users, allowing for centralization of infrastructure. Second, capacity during peak-use times increases. Third, the underlying infrastructure can be upgraded more easily and quickly. Finally, physical security can be improved via centralizing data storage systems.

While there are many benefits to a Network that uses cloud computing, military operations present distinct challenges to this architecture. Bandwidth is often limited for deployed units, especially at lower echelons. Disruptions in service can be frequent, particularly when satellite communications are utilized and CEM threats exist. Environmental factors can also limit bandwidth, and threat action can degrade vital portions of the Network through cyber, electronic or physical attack. In addition, there are the frequently unpredictable demands of combat on friendly forces, requiring both additional bandwidth (to accommodate more users and additional information requirements) and increased responsiveness (for access to vital resources and services) from the Network. The cloud must be designed to be robust, resilient and capable of dynamic reconfiguration, both physically and virtually.

BG ***Charles A. Flynn*** *serves as the special assistant to the commanding general, U.S. Army Forces Command, Fort Bragg, N.C. Previously he served at Fort Leavenworth, Kan., as the first director of the Mission Command Center of Excellence (MC CoE) and the acting commander of the Combined Arms Center.* ***BG Wayne W. Grigsby Jr.*** *is the director of the MC CoE. Previously he served as the director of the School of Advanced Military Studies at Fort Leavenworth and held leadership positions during both the Afghanistan and Iraq surges.* ***COL Jeff Witsken****, USA Ret., is the chief of the Network Integration Branch for the MC CoE. He served as an armor officer for more than 30 years, directing the analysis behind the Army's transformation to the modular force and helping shape the Army's strategy for unmanned aerial systems.*

Impacts on Network Design

Given these factors, Network design must also account for the impacts of environment, limited infrastructure and threat. Sophisticated adversaries will seek to fragment and isolate our formations and their supporting communications networks. To combat this, the Network requires four primary design features.

Compartmentalization. This ensures that the cloud retains functionality even when significant portions of it are degraded or not functioning. This redundancy is achieved through the creation of layers or echelons in structure and management. These echelons, or clouds within clouds, provide redundancy in terms of access, information locations and data pathways. This allows units to operate in

THE POWER TO BLIND THE ENEMY OR DISAPPEAR INTO THIN AIR WITH THE FLIP OF A SWITCH.

Visit us at facebook.com/surefire

The SureFire M952V LED WeaponLight gives you visible light and IR capabilities in a single head without the need for filters or incandescent bulbs. Just rotate the self-locking bezel selector ring to go from blinding white light to 120 mW of infrared output. The power is yours.

SUREFIRE

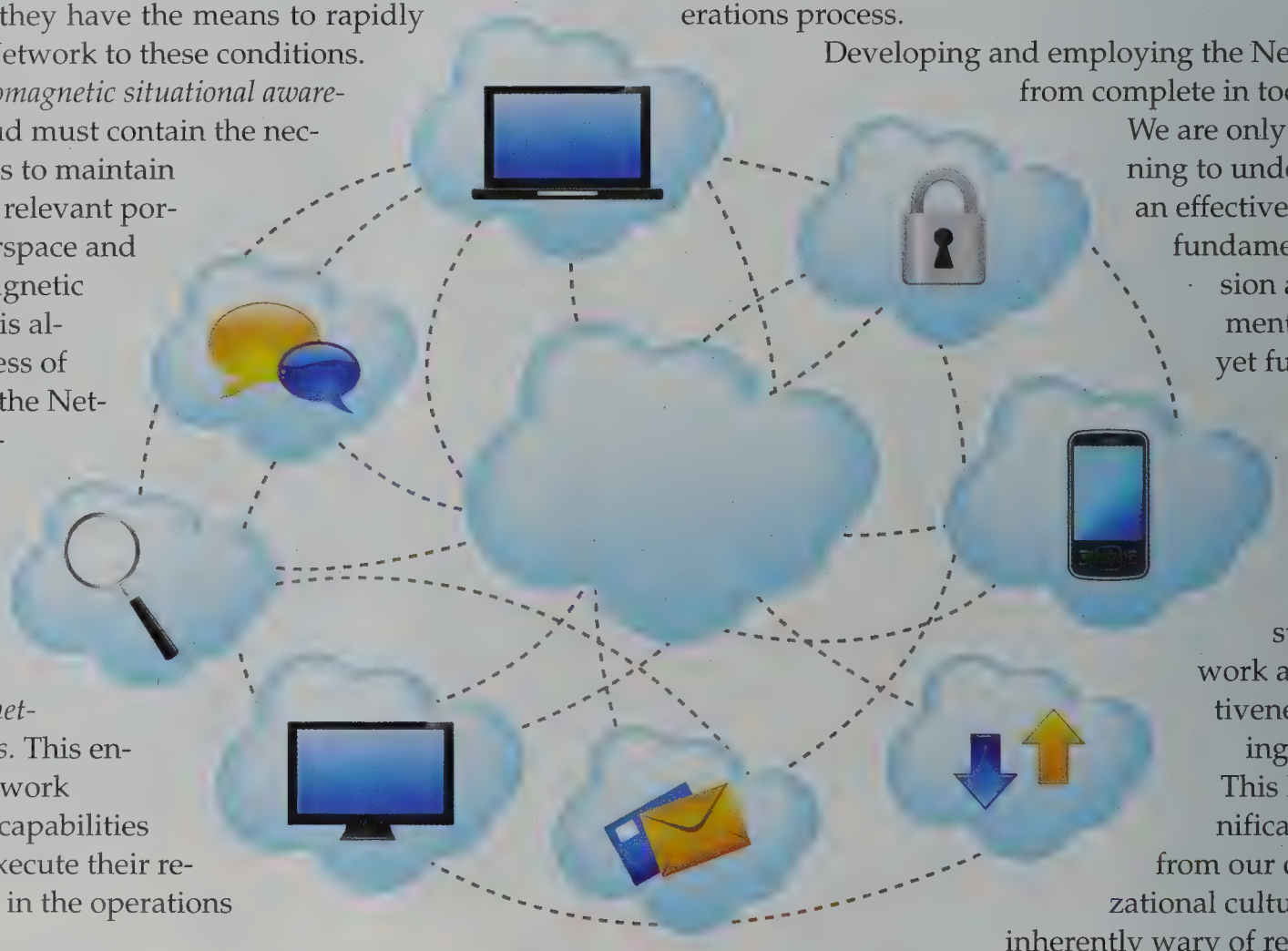
surefire.com/M952V

isolation and under degraded conditions. Consider a "company cloud" located within the physical footprint of an infantry company. This cloud functions as the local information repository and the company's communication Network. It would be able to function whether connected to a higher echelon cloud or not—thus still providing the company some measure of communication and information even when communications are disrupted.

Flexibility. Conditions in combat and other military operations change rapidly, particularly for the Network. As our forces employ communication technology, we must ensure they have the means to rapidly adapt their Network to these conditions.

Cyberelectromagnetic situational awareness. The cloud must contain the necessary sensors to maintain awareness of relevant portions of cyberspace and the electromagnetic spectrum. This allows awareness of the health of the Network and dynamic reactions to changing conditions.

Tight link between commanders and network managers. This ensures the Network provides the capabilities required to execute their responsibilities in the operations process.



Employing the Network

For the cloud Network to truly enable commanders to understand, visualize, describe, direct, lead and assess, desired performance must be described in operational terms. Essentially, the desired operational state drives the state of the cloud (attributes such as accessibility of information, physical location, responsiveness and redundancy). In describing these essential services and parameters, commanders enable the physical and virtual maneuver of the cloud to match the operational scheme of maneuver. Five ideas that will help shift the paradigm for describing the desired operational state are:

- *Bandwidth as a class of supply.* Commanders and their staffs need to understand how to manage, control and weigh the focus of available bandwidth to support operations.
- *Data and information as ammunition.* Just as commanders pay close attention to the availability and location of ammunition on the battlefield, they must also focus attention on the availability and location of their data and information.
- *The cloud as fire support.* As commanders concern themselves with sufficient indirect fire support during operations, they must also address the positioning and structure of the cloud during their operations.
- *Sensors and the Network as pacing items.* In addition to the status of vital weapons systems, commanders need to know the status of their important information sources and dissemination means.
- *Sensors, weapons and the Network as a single function.* Sensors, weapons and the enabling Network must be planned, arrayed and employed holistically within the operations process.

Developing and employing the Network is far from complete in today's Army. We are only now beginning to understand that an effective Network is fundamental to mission accomplishment. We do not yet fully comprehend, however, what right looks like. We still cannot truly measure the Network and its effectiveness supporting operations. This leads to significant obstacles from our own organizational culture, which is inherently wary of revolutionary technological change. Overcoming this will take energetic and robust efforts, fusing our human networks with technology and processes.

Just as the commander must synchronize weapons systems to achieve his ends and manage classes of supply to support them, he must integrate the Network across warfighting functions and the overall operation while managing bandwidth as a class of supply. As the Network has both physical and virtual structures, the commander must set the conditions for its successful employment in the physical domains, in cyberspace and in the electromagnetic spectrum. Only then will Army units successfully see their human networks evolve to achieve mission accomplishment in an environment of rapid technological innovation.

Ultimately, the Network is little more than networks of people, linked by technology, driving toward mission accomplishment. In the Army, this takes the form of the systems that provide a commander the tools to rapidly assimilate information and issue sound guidance. To accomplish this, the commander must use physical and virtual leadership to forge a shared purpose and understanding. ★

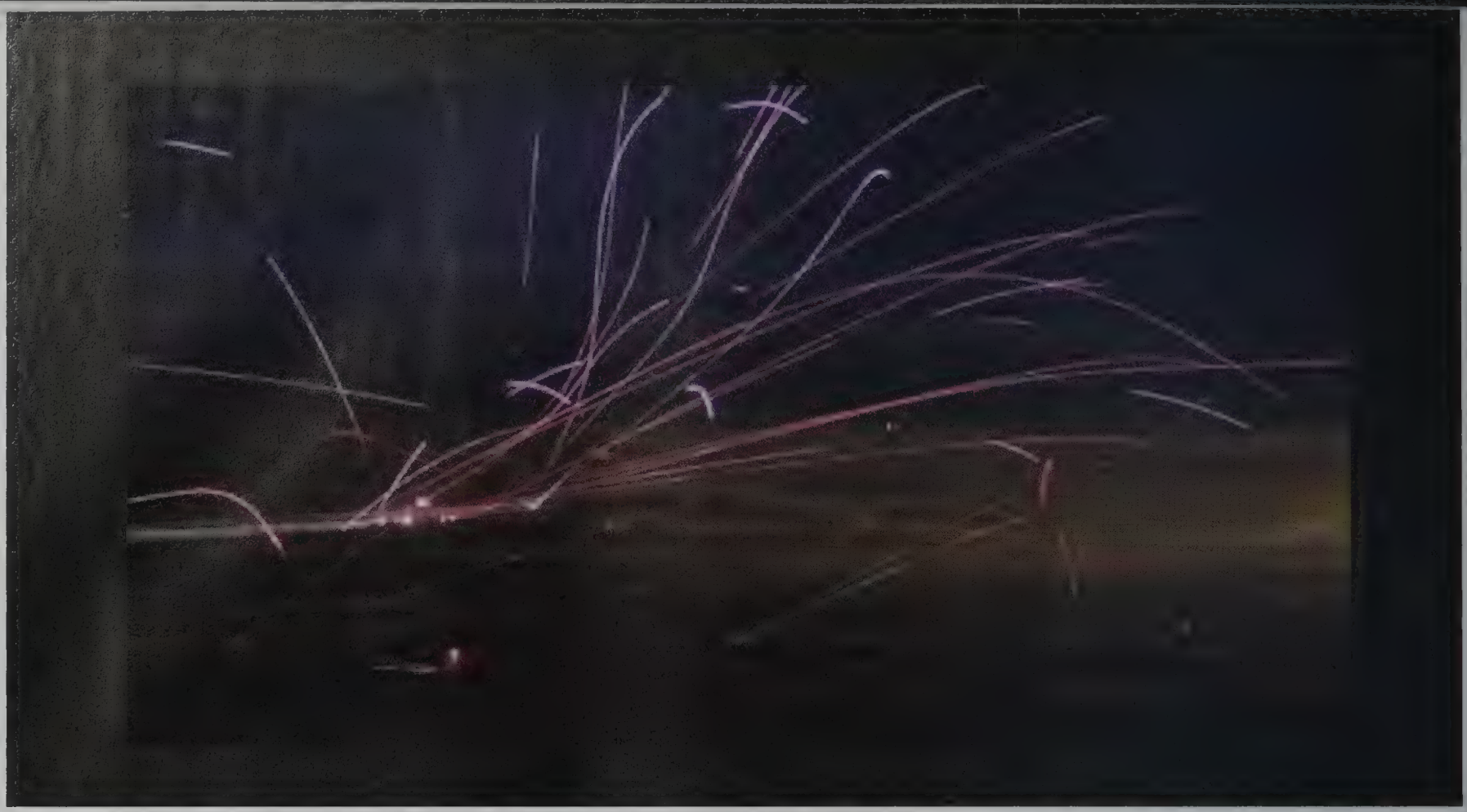
The Human Dimensions In the Close Fight

This night's patrol had been a wasted effort. Three hours of carefully scripted maneuver through enemy terrain had resulted in nothing but fatigue and sore muscles. The squad moved through the darkness on an invisible tether, each man marking the distance from his buddy as if a hidden hand moved them closer or farther away, depending on the cover available. Now they were working across a wide ridgeline stepping over or around boulders and scrub pines that impeded progress.

The soldiers were particularly alert now because they knew the enemy's habit of ambushing returning patrols just out of machine-gun range from their patrol base. Perhaps the enemy knew the night was too quiet, the patrol schedule too routine, and the temperament of the men too focused on hot food and the security of the walls and wire of the fortified outpost that awaited them just a mile or two away.

Nothing is more searing in the human consciousness than the silence of night broken by the intense staccato of gunfire. Thank God this enemy always shoots high against figures silhouetted in the skyline. Only one man was down, the rest flopped prone into a firing position. Now the fight of their lives would begin. ...

By MG Robert H. Scales
U.S. Army retired



This narrative is repeated virtually every day by our ground forces in some of the most dangerous and inhospitable places in the world. The lives of soldiers in small units depend on the ability to fight and win in the close fight. Their fight is a very human one, a test of skill and a will to win. For a moment, place yourself on this ridgeline and imagine how the psychological strength of these men might be amplified by better understanding the human dynamics that make soldiers and leaders into superbly competent small units.

■ **See and sense the enemy so that there are no surprises.** Every psychological advantage on the battlefield is enhanced by knowledge of the enemy. Courage, cohesion, audacity, and the ability to maneuver without caution or friction are vital. In fact, dominance in the close fight is defined by one side seeing the enemy while remaining unseen.

■ **Emotional stability.** Maintain condition short of the emotional breaking point. War is a test of will. Lord Moran in his classic work, *Anatomy of Courage: The Classic Study of the Soldier's Struggle Against Fear,* defines courage as a crucible of emotional staying power that is drained by exposure to all of the wearing effects of close combat. First among these is fear, of course, but there are others: thirst, fatigue, hunger, a sense of isolation, distrust of leaders and fellow soldiers and the fear of dying alone. Even the best-trained small units begin to drain the crucible of courage once serious shooting begins and the rate of emptying accelerates as the battle continues. The unit "breaks" when the crucible empties and the unit is stressed beyond its emotional breaking point. When a unit goes beyond this point it can no longer remain cohesive and effective and must be removed from the battlefield to be rebuilt physically and emotionally. The key to long-term fighting power is for commanders to anticipate the breaking point in the heat of battle and remove the unit from direct combat immediately before it collapses.

■ **Group resilience.** Resilience is a collective trait that defines the ability of a unit to snap back from emotional, psychological or physical erosion after a close-combat engagement. This emotional elasticity comes from a unit that has a reserve of those traits that define the ability of a unit to be stretched and returned to full combat capability in a very short time: Physical fitness is essential. So also is the ability of each soldier and leader to quickly shake off the trauma of initial contact.

■ **Graceful degradation of collective resolve.** The ability to moderate the rate of emotional decline in combat is essential. Anecdotal evidence from previous close-combat engagements strongly suggests that the ability to flatten the sine curve of collective emotion in the close fight is an important component to staying effective and avoiding moral collapse throughout the engagement.

■ **Cognitive clarity.** Seeing is not enough. Commanders must be able to deaden their emotional highs and lows so that they retain the ability to make decisions intuitively with less than perfect information and often alone, under extreme stress. Cognitive clarity comes with the ability to trust emotion over reason, to develop a finely tuned ability to decide under pressure and ignore the caution that comes from waiting on more information or wasting time trying to invoke traditional military decision-making processes.

■ **Trust in available support.** Every small unit in contact knows that it cannot fight alone. Confidence in winning, audacity to continue the fight and willingness to stay when outnumbered all depend in large measure on trust that soldiers will be supported by others. No small unit carries enough ammunition and supplies to last for very long. No soldier will fight audaciously unless he is sure

---

MG Robert H. Scales, USA Ret., is CEO of Colgen, a consulting firm that focuses on landpower. This article will be part of a new book, Yahara's Long Shadow, *a history of landpower in the American Era since World War II.*

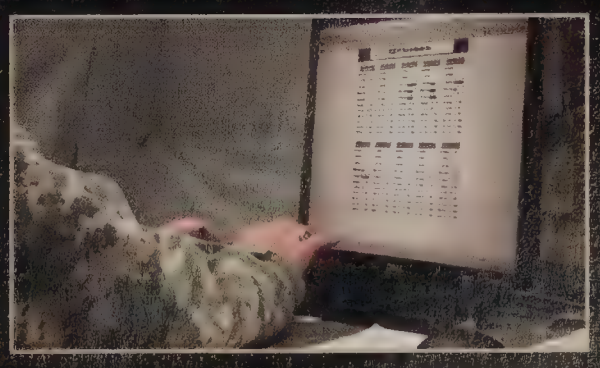
DRASH®

THE WARFIGHTER'S CHOICE

INTELLIGENT POWER TECHNOLOGY®

REDUCE FUEL CONSUMPTION AND STREAMLINE POWER MANAGEMENT WITH A SINGLE NETWORKED POWER MICROGRID

DRASH Intelligent Power Technology® (IPT) is an advanced smart system enabling users to connect several digital trailer-mounted generators together to form a networked power microgrid. Once activated, each generator is automated to turn "on" and "off" based on real-time power demands and can be remotely monitored from inside your TOC refocusing more soldiers on the true mission. Not only does DRASH Intelligent Power Technology® offer exceptional fuel savings, it reduces wear and tear and works everywhere you do. To learn more about how DRASH Intelligent Power Technology® delivers more sustainable power for your needs, contact one of our representatives.



DHS SYSTEMS LLC
A DHS TECHNOLOGIES COMPANY

1-877-GO-DRASH drash@drash.com www.drash.com/ipt

that he will be evacuated if wounded. No soldier carries enough killing power on his back to achieve firepower dominance over an enemy likely equipped with small arms as lethal as his own.

■ **Trust in leaders.** At the small-unit level trust comes from confidence among soldiers that a leader's decision-making skills will give them the greatest chance of surviving contact with the enemy. Thus a soldier's trust at the small-unit level is less sensitive to other factors traditionally sought at the operational or strategic level such as intelligence or rank. Soldiers will always follow a leader who braves the crack of the first round and reacts in a manner that will get the mission done at the least cost in blood.

■ **Moral suppression.** Those familiar with the dynamics of close combat will attest to the phenomenon of moral authority in the close fight. When units enter the deadly zone usually both sides are aware of who will win. Past performance and reputation are powerful forces that often make one side assume a position of inferiority. Conversely, soldiers who are confident in their abilities and those of their buddies and leaders generally cannot be beaten. Suppressing an enemy's will to fight can only be done by achieving a long-term, sustained level of moral dominance through extraordinary battle skill and audacity demonstrated over time. In today's networked environment subjected to exposure by the global media, however, a single incident of poor performance or substantial loss in a single engagement will have an inordinate effect on the performance of the entire ground effort.

■ **Heightened senses.** Some soldiers and leaders possess an intuitive ability to see the battlefield. Part of this skill, of course, comes from familiarity with physical surroundings. Others gain the advantage by exercising an extraordinary ability to "read" emotions of the indigenous population. Some can actually sense the presence of the enemy and smell out particularly dangerous situations. The best of these native scouts use onboard or remote electronic sensors to see well ahead, deeply beyond their immediate surroundings.

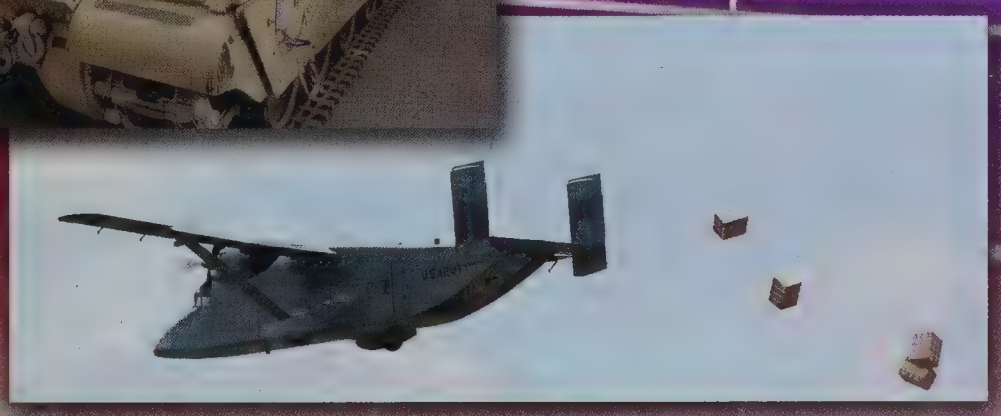
■ **Comfort with killing.** Destroying a life is not a natural act. As we have seen in the alleged acts of a single rogue infantryman recently in Afghanistan, mindless killing is an act of psycho pathological behavior and cannot be tolerated in combat. Thus an effective small unit must possess a delicate emotional balance between restraint and ultimate aggression in close combat. Most experienced combat veterans will testify that the hardest kill is always the first. More often than not, first kills will have to be experienced against an enemy to whom killing is a natural act. Thus one of the most difficult leadership tasks in the human dimension is for a commander to inure his team emotionally to killing from the very beginning of an operation with no psychological workup.

■ **Lessened fear of spatial and temporal isolation.** The greatest single source of psychological friction on the battlefield is the fear of dying alone. The fear of a violent death permeates a soldier's being, and long isolation saps all of his senses. This fear is reduced by constant reinforcement by leaders and the touch of a nearby buddy. As the fight begins, the noise and confusion of the close fight amplifies the need for reinforcement and touch at the very time when both are very difficult to achieve.

As the Army and Marine Corps downsize in the years ahead, the number of close-combat soldiers will certainly, and unfortunately, be reduced in proportion. Ten years of war have been the catalyst that accelerated the modernization of soldier weapons and equipment. Now that peace is near and money grows short, materiel modernization will surely slow or even stop. After years of study, lecturing and prodding I believe now more than ever that the best investment we can make of our diminishing human and capital resources would be to use the human sciences to improve the fighting power of close-combat soldiers, to focus as much on what goes *in* the soldier as what goes *on* the soldier. ★

Supplying the Future of Army Logistics

"Logistics is the stuff that if you don't have enough of, the war will not be won as soon as."
—MG Nathanael Greene, Quartermaster General, Continental Army



Logistics represents the sinews of military operations, which for the U.S. Army today include combat, peacekeeping, humanitarian operations, civil emergency readiness, cooperation and relationship building with allied nations, and training activities throughout the world. Complexity is immense, and challenges are great. Meanwhile, Army logisticians must prepare for the future.

In the following pages, five articles highlight ongoing logistics activities under the U.S. Army's Office of the Deputy Chief of Staff, G-4, that look toward the future:

■ "Unmanned Systems for Logistics"—The Logistics Innovation Agency (LIA) is developing advanced unmanned systems for air and ground logistics delivery to decrease workloads and warfighter risks. Ranging from forklifts to aircraft, these systems can be leveraged as force multipliers and standoff threat reducers.

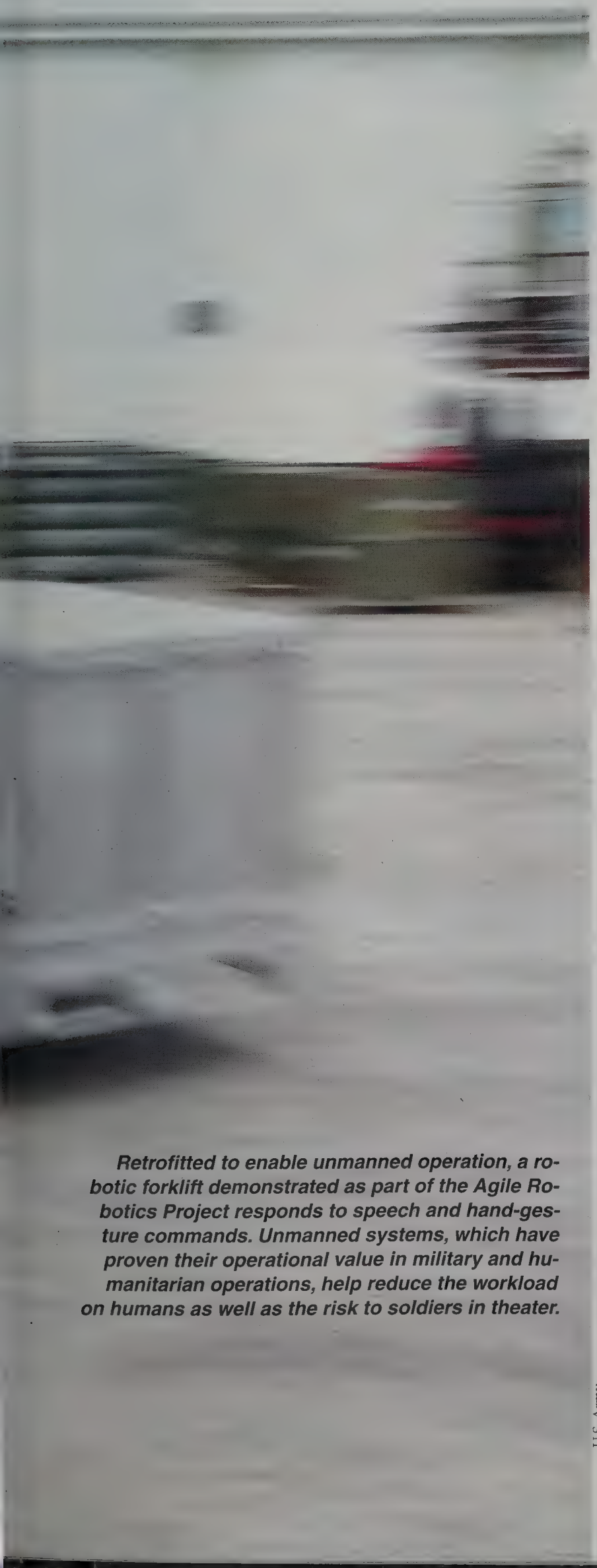
■ "The Freedrop Delivery System: Aerial Delivery Capability to Support Our Forces"—Aerial logistics delivery operations have grown in importance, and the LIA has supported and contributed to the development and fielding of several aerial delivery systems now in widespread use, including the Low-Cost Low-Altitude parachute system. Currently, the LIA is exploring the potential of the Freedrop Delivery System, which does not use parachutes. Instead, it employs energy-absorbing packaging innovations to deliver supplies in austere environments, achieving high success rates.

■ "Balancing the Tactical Wheeled Vehicle Fleet for Army 2020: Divesting for Success"—The Army must align its tactical wheeled vehicle (TWV) fleet with emerging strategy and force realignment and achieve the right numbers and mix of TWVs to support Army 2020.

■ "Army Mobility Asset Tracking System"— The LIA is exploring an advanced commercial off-the-shelf wireless communications system to track assets, equipment and supplies. Called the Next Generation Wireless Communications system, the project grew from the idea that if tracking tags could communicate with and through other tags, forming a network, asset visibility could be extended.

■ "The Energy Calculator: The Fully Burdened Cost Tool"— Developed by the Army Environmental Policy Institute, the Fully Burdened Cost Tool estimates the true cost of supplying fuel and water to the battlefield. Quantifying costs is the first step in better managing the supply of water and fuel, allowing different technologies to be analyzed and compared.

MIT
TOYOTA



Retrofitted to enable unmanned operation, a robotic forklift demonstrated as part of the Agile Robotics Project responds to speech and hand-gesture commands. Unmanned systems, which have proven their operational value in military and humanitarian operations, help reduce the workload on humans as well as the risk to soldiers in theater.

U.S. Army

Unmanned Systems For Logistics

By Janina Plinsky, Demetrius Glass and John Yates

The Logistics Innovation Agency (LIA)—the field operating agency of the U.S. Army G-4—is conducting analyses and demonstrations to accelerate development of advanced unmanned air and ground system capabilities for logistics. LIA's efforts are consistent with and within the confines of the Department of Defense Unmanned Systems Integrated Roadmap 2011–2036 and in collaboration with the robotics community of interest.

In the last decade, advancements in computing and the demand for increased warfighter protection have led to quick and wide-scale adoption of many unmanned systems across the DoD domains of air, ground and maritime. These systems provide capabilities to conduct a broad range of operations from battlespace awareness to intelligence, surveillance and reconnaissance missions.

Unmanned systems have proven their operational value in military and humanitarian operations, showing they excel in providing standoff from dull, dirty and dangerous missions. Their advantages include persistence, speed and maneuverability. They also help to decrease the workload on humans and reduce the risk to the warfighter, often more effectively and inexpensively than manned systems.

DoD's vision is a seamless integration of manned and unmanned capabilities that can provide more flexible options for joint warfighters. A number of important challenges have been identified and addressed by the Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics (OUSD AT&L) as stated in its *Unmanned Systems Integrated Roadmap 2011–2036.*

■ *Interoperability.* To achieve the full potential of unmanned systems, these systems must operate seamlessly across the domains of air, ground, and maritime and also operate seamlessly with manned systems. Robust implementation of interoperability tenets will contribute to this goal while also offering the potential for significant lifecycle cost savings.

■ *Autonomy.* Today's iteration of unmanned systems in-

JLG Industries

Logistics Innovation Agency (LIA) is working to develop kits that can convert existing platforms, like the All Terrain Lifter, Army System (ATLAS) II 10,000-pound tactical forklift, to unmanned operation.

volves a high degree of human interaction. DoD must continue to pursue technologies and policies that introduce a higher degree of autonomy to reduce the manpower burden and reliance on full-time high-speed communications links while also reducing decision loop cycle time. The introduction of increased unmanned system autonomy must be mindful of affordability, operational utilities, technological developments, policy, public opinion and their associated constraints.

■ *Airspace Integration.* DoD must continue to work with the Federal Aviation Administration to ensure unmanned aircraft systems (UAS) have routine access to the appropriate airspace needed within the National Airspace System to meet training and operations requirements. Similar efforts must be leveraged for usage of international airspace.

■ *Communications.* Unmanned systems rely on communications for command and control and dissemination of information. DoD must continue to address frequency and bandwidth availability, link security, link ranges, and network infrastructure to ensure availability for operational/mission support of unmanned systems. Planning and budgeting for UAS operations must take into account realistic assessments of projected SATCOM (satellite communications) bandwidth, and the community must move toward onboard preprocessing to pass only critical information.

■ *Training.* An overall DoD strategy is needed to ensure that continuation and joint training requirements are in place against which training capabilities can be assessed. Such a strategy will improve basing decisions and training standardization and has the potential to promote common courses resulting in improved training effectiveness and efficiency.

■ *Propulsion and Power.* The rapid development and deployment of unmanned systems has resulted in a corresponding increased demand for more efficient and logistically supportable sources for propulsion and power. In addition to improving system effectiveness, these improvements have the potential to significantly reduce lifecycle costs.

■ *Manned-Unmanned Teaming.* Today's force includes a diverse mix of manned and unmanned systems. To achieve the full potential of unmanned systems, DoD must continue to implement technologies and improve tactics, techniques and procedures that improve the teaming of unmanned systems with the manned force.

Based on the DoD vision, the Army is applying these capabilities for logistics operations in areas such as material handling, robotics-based packaging and warehousing, which can reduce the heavy physical burden on the warfighter. For example, transportation of supplies is an applicable, routine task particularly suited for unmanned systems in all types of ground terrain. Routine maintenance-related tasks, such as changing oils and lubricants and refueling, can be performed by unmanned systems. Munitions, material handling and combat engineering are all ideal tasks that can be allocated to unmanned systems to enhance safety as well as increase efficiency. In addition, casualty evacuation and care, human remains evacuation, and urban rescue are also tasks that can be performed by unmanned systems.

LIA has been actively involved in assessing the requirement for a cargo unmanned aircraft system (Cargo UAS). The U.S. Army Combined Arms Support Command (CASCOM) and the Army G-4 study, *The Future Modular Force Resupply Mission for Unmanned Aircraft Systems*, assessed the technical and operational feasibility of a Cargo UAS. This study concluded that a Cargo UAS was a viable method to support units in locations difficult or impossible to resupply by ground convoys. LIA also completed a cost benefit analysis that demonstrated the operational fiscal viability of Cargo UAS. This study concluded that from an

---

Janina Plinsky *is a logistics management analyst for the Army G-4, Logistics Innovation Agency (LIA). She is a graduate of Kansas State University and has a master's certificate in project management.* ***Demetrius Glass*** *is a logistics management analyst for the Army G-4, LIA. He is a graduate of Newberry College and holds a master's degree in information systems from George Washington University. He is a graduate of the Air Command and Staff College, the Marine Corps Command and Staff College, and the Air War College.* ***John Yates*** *is a project lead for the Army G-4, LIA. He has a degree in electrical and computer engineering from the University of South Carolina and is a graduate of the U.S. Navy Acquisition Logistics Program.*

Agile.

Delivering a single network to all functional areas of the battlefield, even the most remote locations. That's our top priority at General Dynamics. We are working smarter and with more agility to deliver systems and products integrated to support the Joint Force so that Soldiers can more safely and effectively execute their missions.

To learn more, visit **www.gdc4s.com/army**

GENERAL DYNAMICS

©2012 General Dynamics. All rights reserved.
Photo credit: Staff Sgt. Jacob M. Bailey, U.S. Army

U.S. Marine Corps

LIA found that cargo unmanned aircraft systems, like the GPS-guided K-MAX, could be a viable alternative to the present method of moving supplies to units in remote areas.

The unmanned helicopter-like A160 Hummingbird Warrior has a range of 2,500 miles and carries a payload of 1,000 to 2,500 pounds.

Boeing

operational standpoint, a distribution system with a mix of supporting Cargo UAS platforms could be a viable alternative to the present method of moving supplies to units in austere locations by traditional means such as convoys.

For ground systems, LIA conducted an analysis on the state of robotics and identified potential high-payoff applications for logistics. Based on this analysis, LIA teamed with the CASCOM Sustainment Battle Lab and other stakeholders to develop and demonstrate unmanned material-handling capabilities for tactical supply support. The Agile Robotics Project leveraged prior work done by the Massachusetts Institute of Technology as part of the Defense Advanced Research Projects Agency Urban Challenge. The result was semi-autonomous, material-handling capabilities that were successfully demonstrated at an active supply support activity at Fort Lee, Va., in the summer of 2010 as part of the Agile Robotics Project [ARMY Magazine, March 2010]. The demonstration consisted of a commercial forklift that was retrofitted to enable unmanned operation. A primary challenge was enabling the forklift to safely conduct operations in an unstructured environment. In addition the forklift interacted with humans in a natural way, allowing it to become accepted as part of the team. Specifically, the forklift was able to interpret tablet-based gestures and verbal commands and learn about the environment through a guided tour, similar to how a "rookie" operator would learn and interact. The forklift also had the ability to conduct a seamless handoff of control from unmanned to manned and back again.

In 2011, the Research, Development and Engineering Command (RDECOM) established an Automated Material Handling Technologies (AMHT) Integrated Product Team along with CASCOM and LIA to further develop autonomous material-handling capabilities for depot and tactical operations. The Agile Robotics software code and technical documentation were provided to RDECOM to further develop and mature capabilities. LIA is currently working with the U.S. Army Training and Doctrine Command Joint Ground Robotics Integration Team to develop modular appliqué kits that can be readily added to existing platforms to enable unmanned operations. Use of standard kits will allow for a range of systems from tactical wheeled vehicles to material-handling equipment, such as the All Terrain Lifter, Army System (ATLAS) II 10,000-pound tactical forklift, to be converted to unmanned (optionally manned) operation.

Unmanned systems will continue to have great strategic value in terms of a force multiplier and standoff protection from threats. The Army's use of unmanned logistics systems will help enable high-performance, agile and flexible support to soldiers, while maximizing soldier protection. In addition, the advancement and use of unmanned systems will free up manned resources for other higher priority missions. With the expected asymmetric nature of future conflicts, the Army logistics community must leverage innovative solutions to meet current and expected operational needs, improve survivability and increase flexibility of sustainment support solutions for the joint force.

LIA, as the innovator for U.S. Army Logistics, will continue to pursue unmanned systems capabilities. We will work in conjunction with stakeholders to research and implement the smartest, most cost-effective set of capabilities available. ★

THE ULTIMATE HEAD PROTECTION

The ultimate protection from trauma—

Blunt force, blast and ballistic.

With a lightweight wearability...

That allows for peak performance.

INTRODUCING BATLSKIN™

THE WORLD'S FIRST FULLY INTEGRATED, FULLY MODULAR HEAD PROTECTION SYSTEM.

More science. More technology. More protection. Less weight.
And you can tailor the system to the mission.
So a soldier can do what a soldier does.

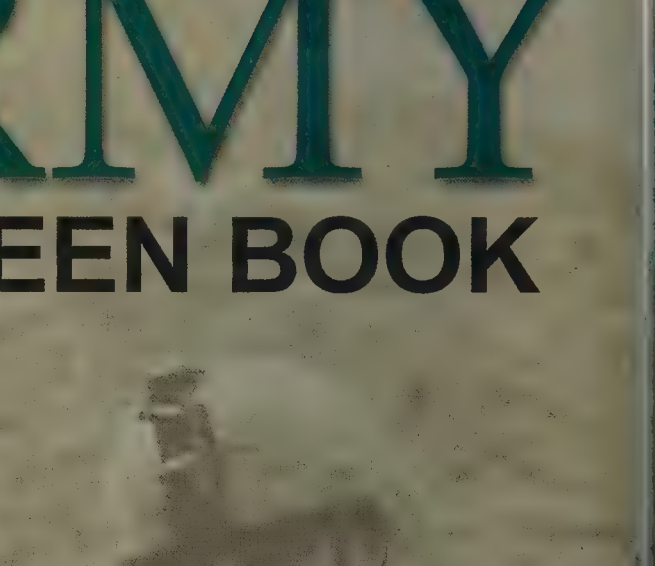
BE REVISION READY.®

revisionmilitary.com/batlskin

REVISION.

© 2011 REVISION MILITARY INC. BATLSKIN™ IS A TRADEMARK OWNED BY REVISION MILITARY S.A.R.L. AND USED UNDER LICENSE BY REVISION MILITARY INC. BE REVISION READY® AND ® ARE REGISTERED TRADEMARKS OF REVISION MILITARY. REVISION MILITARY LTD. 7 CORPORATE DRIVE, ESSEX JUNCTION VT 05452 USA

ARMY
2012 GREEN BOOK



Photos Courtesy of U.S. Army

Your best buy in advertising for reaching Army leaders again and again!

The 2012 ARMY Green Book, which is the October issue of ARMY Magazine, is used by military and government personnel as a yearlong reference tool.

Not only will it be sent to Army leaders who are members of AUSA, it will also be distributed at the Association of the U.S. Army (AUSA) Annual Meeting and Exposition in October. Total circulation of the GREEN BOOK is over 100,000.

Advertising Reservations Due
20 August 2012

Advertising Materials Due
3 September 2012

Advertising Department:

Irene Lamar
Jim Burke
230 Park Avenue, Suite 1546
New York, NY 10169
(212) 697-2844
Fax (212) 682-1421
ADVDPT@aol.com

U.S. Army

The Freedrop Delivery System

Aerial Delivery Capability To Support Our Forces

The U.S. Army Logistics Innovation Agency (LIA), through its Freedrop Packaging Concept Project (FPCP), has made significant strides in the development of the Freedrop Delivery System (FDS) as part of the Army's Integrated Logistics Aerial Resupply concept.

Understanding the growing importance of aerial delivery operations to supporting and sustaining the force, LIA has worked diligently over the last several years to play a contributing role in the development and advancement of many aerial delivery systems. Past capabilities that LIA has supported and that are currently in widespread use in theater include the Joint Precision Airdrop System, the Low-Cost Aerial Delivery System (LCADS), and the Low-Cost Low-Altitude (LCLA) parachute system, which LIA conceptualized, spearheaded and transitioned to the Product Manager Force Sustainment Systems (PMFSS).

U.S. Army

Top, a C-23 Sherpa aircraft deploys four packages using the Freedrop Delivery System, one of the resupply concepts the Logistics Innovation Agency is developing to support and sustain the force. Above, Ugandan soldiers recover a freedrop delivery deployed from a helicopter during a training exercise.

By Craig Brammer
and
COL Daniel L. Labin
U.S. Army retired

A Malian air force Tetra drops a box of mock supplies as part of aerial resupply training during operation Atlas Accord 2012 near Mopti, Mali, in February. The exercise demonstrated the value of aerial resupply for humanitarian aid such as water and medicine to remote areas.

U.S. Army/SGT Mark Henderson

In an effort to add more aerial delivery capability to the combatant commander's arsenal, LIA's FPCP team has been actively exploring freedrop (using no parachutes) as another potential capability in the LCADS suite of systems. In fact, the FPCP is a continuation of the LCLA project that LIA began several years ago but that focused exclusively on developing and fielding an inexpensive, disposable, one-time-use parachute system. Once LIA had successfully tested the LCLA parachute system, deployed it to Afghanistan in support of our combat forces and subsequently transitioned the LCLA capability to PMFSS, LIA then began to investigate the potential of developing a freedrop capability that could be used to support operations in Afghanistan.

The FPCP team began the project by investigating and testing the viability and practicality of a new and innovative sheet-folding technology, which calls for folding paper in chevron patterns to absorb more energy with less volume of energy-dissipating material (EDM). This innovation, which is significantly different from the standard honeycomb EDM, was conceptualized by members of the Department of Industrial and Systems Engineering at Rutgers University. In its most basic form and application, this process entails folding flat sheets of paper into variations of three-dimensional chevron structures. These folds have proven to be extremely effective in absorbing impact energy without subjecting supplies to high acceleration forces and damage. (The FPCP team has also investigated and successfully tested the use of honeycomb EDM variations to achieve project goals as well.)

U.S. Army/SGT Mark Henderson

U.S. Army/SGT Mark Henderson

One goal of the FPCP has been to provide an innovative, reliable and inexpensive freedrop capability that units can use at the operational and tactical levels to support and sustain small-unit operations in austere, unforgiving and remote operational areas like Afghanistan. To this end, the FPCP team has been highly successful in its efforts, proving through a series of rigorous developmental and operational tests (DT/OT) that the capabilities of the FDS can meet these challenging goals. More specifically, FDS test results revealed a number of important findings.

The structural attributes and integrated design of the FDS successfully protect a range of cargo from any damage that would preclude its use or consumption by units or soldiers in accomplishing their missions. The survival rates of all supplies dropped have consistently and reliably exceeded 95 percent. Of the 230,360 rounds of ammo that have been dropped during FDS tests at the U.S. Army Aberdeen Test Center (ATC), Md., only two .50-caliber rounds could not be test-fired by the ATC as a result of damage. Other supplies that were dropped in the FDS routinely approached 100 percent survival rates. Supplies that were

---

*Craig **Brammer** is a logistics management specialist for the Army G-4 Logistics Innovation Agency (LIA). He is a graduate of Mount Vernon Nazarene University and began his Army career through the Civilian Logistics Career Management Office intern program. **COL Daniel L. Labin**, USA Ret., is a senior logistics specialist with Pacific Northwest National Laboratory supporting the Army G-4 LIA. He is a graduate of West Virginia University and holds master's degrees from the University of Southern California and Florida Institute of Technology.*

AUSA's Institute of Land Warfare invites you to

GIVE VOICE TO YOUR KNOWLEDGE

The Association of the United States Army's professional education program is designed to identify, discuss and influence the outcome of significant issues that affect the U.S. Army and national defense. AUSA's Institute of Land Warfare (ILW) accomplishes this goal through the sponsorship of writing programs, for which quality manuscripts are needed.

ILW would like to invite you—past and present servicemembers, Army civilians, friends of the Army and others with an interest in and knowledge of national defense—to submit a manuscript to one or more of our writing programs. Membership in AUSA, while always encouraged, is not a requirement for participation.

CALL *for* MANUSCRIPTS

For important information on the Institute of Land Warfare writing program, categories and submission guidelines, please visit http://www.ausa.org/publications/ilw/Pages/WritingProgram.aspx.

New York Army National Guard CSM Justin Lenz (left) and Malian army Lt. Abdrahamane Kone, discuss aerial resupply methods during Atlas Accord 2012 in Mali.

U.S. Army/SSG Shana R. Hutchins

successfully tested in the FDS included 5.56 mm, 7.62 mm and .50-caliber ammo; Meals, Ready to Eat (MREs); bottled water; selected Class IX repair parts; radio batteries; intravenous (IV) bags; and other necessary supplies, all of which were recommended for DT/OTs by units of the XVIII Airborne Corps and other stakeholders.

The FDS can be successfully and safely dropped at altitudes of up to 90 feet above ground level and at airspeeds of up to 120 knots. This enables it to be deployed from fixed-wing aircraft, a key requirement of the U.S. Army Special Operations Command.

The FDS can be deployed from a variety of both rotary and fixed-wing aircraft. To date, the system has been deployed from the UH-1, OH-58, UH-60 and Mi-17 helicopters, as well as the C-23 Sherpa fixed-wing aircraft. These particular events included FDS operations and training support to the parachute riggers and pathfinders of the 197th Special Troops Company of the Utah Army National Guard (ARNG), the 294th Quartermaster Company of the Texas ARNG, the 2/19th Special Forces Group (Airborne) of the West Virginia ARNG, and the 5th Quartermaster Company located in Germany.

Multiple FDS systems can be deployed from fixed-wing aircraft on a single pass over the drop zone. This enables a significant amount of supplies to be dropped in one pass on a very small drop zone with great accuracy and tight dispersion. This in turn makes recovery and distribution of the supplies simple and fast for soldiers and small units on the move. This type of airdrop support is not always practical or achievable with parachute systems, especially when drop zones are very small and hard to reach, like some in Afghanistan.

Building on the success of what has been achieved to date, the FPCP team is now working to improve the FDS capability in support of the stated requirements of our operational partners. Efforts to make the FDS more user-friendly include:

- Developing an FDS collapsible outer box so that transportation and storage costs can be substantially reduced.
- Integrating FDS handles or grips to make DZ recovery operations faster and easier for the soldier.
- Assigning National Stock Numbers to individual FDS components so that units in the field can order them through the standard supply system as requirements dictate.
- Developing the tactics, techniques and procedures for constructing, assembling and using the FDS.

One of the most significant outcomes of the FPCP to date has been what the team has learned through its testing of EDMs. Test results clearly show that one EDM will not protect all supplies from unacceptable damage. In fact, while one EDM variation may be ideal for protecting ammo or repair parts, the same EDM will not protect more fragile supplies from unacceptable damage. Clearly, the potential for being able to develop, produce and use a range of EDM variations will greatly enhance cargo survivability of a wide range of supplies, with a different variation being used depending on the fragility of the supplies being airdropped.

As part of the project, the team successfully tested four EDM variations with supplies of different fragility characteristics. By gearing or adjusting the EDM density or firmness to the fragility of the supplies, the survival rates improved dramatically, in some cases by 50 percent or more. While one EDM variation proved especially effective in delivering ammunition with no damage, another variation proved highly effective in protecting more fragile and pressure-sensitive supplies, such as MREs, IV bags and bottled water.

Related to the comparison of EDM variations, the team is now exploring the feasibility of developing a deployable EDM-production machine that can produce several different variations of EDMs. LIA's preliminary analysis indicates that a deployable EDM-production machine could save millions of dollars per year and significantly reduce the need to ship and store large quantities of EDMs to support operations around the globe. Bottom line: While one EDM may not fit all airdrop scenarios, one deployable EDM-producing machine could.

The use of the FPCP team's FDS capability is not limited to U.S. forces. In 2011, the team deployed 72 systems in support of U.S. Army Africa's (USARAF) Atlas Drop 11 exercise in Uganda. Not only were the systems used to deliver critical supplies to the Uganda People's Defense Forces (UPDF) during this important interoperability exercise, but also an additional 25 systems were left behind for operational use by the UPDF. In February, the FPCP team again supported USARAF by providing 48 systems in support of Atlas Accord 2012 in Mali, Africa. Again, 20 systems were left behind to support Malian units in real-world missions.

The FPCP Team currently anticipates that the major ongoing work of the project should be completed and delivered to the appropriate stakeholders by the end of this year. ★

Balancing the Tactical Wheeled Vehicle Fleet for Army 2020

Divesting for Success

Oshkosh Defense

The Army is at a strategic crossroads. We must determine how to posture for the future while still meeting the requirements of today with funding that is projected to decline over the next several years. Today's Army is in transition, moving from a forward deployed force with boots on the ground to a continental United States-based force that will be more rotationally focused and less likely to be involved in enduring operations.

After more than a decade of equipping an Army for war in two major theaters, the current fleet of tactical wheeled vehicles (TWV) is not aligned with the new strategy. There are too many TWVs in the inventory as the Army moves toward the Army of 2020.

The challenge facing leaders across the Army is how to de-

By LTC Royce A. Edington
and
LaVerne M. Douglas

U.S. Army/SPC Bryan Thien

A tactical wheeled vehicle (TWV) mechanic deployed in Afghanistan builds a tactical light mount for an armored vehicle. Upon fielding, TWVs have an estimated useful life of 40 years.

termine the right amount and mix of TWVs to support the Army of 2020. Even though the number of brigade combat teams or major weapon systems—like the M1 Abrams Tank, the M2 Bradley Fighting Vehicle and the AH-64 Apache—dominate most force structure strategy discussions, it is important to remember that without the right mix of TWVs, these combat systems and our Army would not be able to operate and accomplish their assigned missions. These vehicles are the "supporting actors" to daily operations; without them, the script screeches to a halt.

Leaders and analysts across the generating force are continually working similar issues as they look to the future to match capabilities against projected requirements, while also considering technology advancements and funding availability. Numerous studies have analyzed TWVs over the past several years, and, in 2010, the Headquarters Department of the Army (HQDA) G-8 published the "Army Tactical Wheeled Vehicle Strategy," which was intended to chart the way ahead for the next 30 years. The strategy focused on how the Army would fund and equip the force with appropriate platforms to meet required protection levels, while also shaping, sustaining and modernizing the TWV fleet.

As TWVs are fielded into the Army as a system, they are projected to have an estimated useful life (EUL) of 40 years. Over the course of the 40 years, there is a planned recapitalization at the 20-year mark of the vehicle, when the system is rebuilt and appropriate new technologies are integrated in order to increase effectiveness for the remaining 20 years.

As the Army has been at war for over a decade, factors initially not planned for have entered the equation.

■ Most of the TWVs in the inventory have seen increased usage.

■ Because of continuous operations in multiple combat environments, TWVs are being reset—an intensive maintenance procedure not originally programmed into the 40-year life cycle model—to maintain operational readiness.

■ In order to increase survivability on a nonlinear battlefield, TWVs have either received add-on armor or have been fully armored.

These modifications have affected the systems throughout. A few examples include requirements for increased mechanical power and more robust suspension and electrical systems. The adaptations to improve survivability on a nonlinear battlefield have also significantly increased the costs of the systems and the funding required for operational support.

The next evolution of matching the TWV fleet to the force is under way as part of planning for Army 2020. Undoubtedly, the 2010 "Army Tactical Wheeled Vehicle Strategy" will continue to serve as a vital element in this process, but recent decisions by senior leadership have changed the equation. If the Army does not align faster for the future mission, constrained resources will be consumed sustaining vehicles that are no longer required. To get to the right size, the Army will have to divest tens of thousands of TWVs over the next decade. Three essential elements guide the strategy for 2020:

■ Excess vehicles consume resources.

■ Delay in action will result in fewer troops to focus on turning in TWVs.

■ Force structure drives which vehicles, and at what quantities, to turn in.

To meet the challenge, the Army has already initiated a plan to divest more than 30,000 TWVs. In September 2010, HQDA G-4 published an All Army Activities message providing guidance on the divestiture process. After detailed coordination with major commands throughout the Army, HQDA G-8 published an execution order in late fiscal year

---

LTC Royce A. Edington *is Tactical Wheel Vehicles Branch Chief in the Integrated Logistics Support Division, Maintenance Directorate, Headquarters Department of the Army, G-4. He is a graduate of the Army Command and General Staff College and holds an MBA from the University of North Florida. He has completed five operational deployments, including two in Iraq.* ***LaVerne M. Douglas*** *is a tactical wheeled vehicles analyst with the Integrated Logistics Support Division. She is a graduate of North Carolina Central University and has a master's degree from the University of the District of Columbia.*

BECOME A HERO TO A HERO

PFC Matthew Zajac, US Army, 2nd Infantry Division, Fort Carson, Colorado and his father, Mike, photographed at a Fisher House in San Antonio, Texas.

Fisher House Foundation's Hero Miles program provides military members and their loved ones free round-trip airline tickets, sending them to the bedside of their injured service member recovering at a military or VA medical center. Flights are made possible through frequent flyer mile donations by individual airline passengers.

Since its inception in 2004, the generosity of the public has allowed Hero Miles to distribute more than 25,000 airline tickets, saving our heroes and their families more than $40 million. Help reunite America's heroes with their loved ones by donating your miles today. Your contribution will make you a hero to those in need.

For more information, visit **www.fisherhouse.org** and click on *Hero Miles*.

HERO MILES

The Hero Miles program is grateful to our generous partners, including:
AirTran Airways ☆ Alaska Airlines ☆ American Airlines ☆ Continental Airlines
Delta Air Lines ☆ Frontier/Midwest Airlines ☆ United Airlines ☆ US Airways

Hero Miles is a program of the nonprofit Fisher House Foundation.
More information on the Foundation can be found at www.fisherhouse.org.

©2011 Fisher House Foundation / Brendan Mattingly Photography / Don Schaaf & Friends, Inc.

BAE Systems

The low signature armored cab, which can be installed on any of the family of medium tactical vehicles in the Army fleet, provides a crew protection from assault rifle rounds, land mines and artillery fragments.

(FY) 2011 that identified which vehicles and in what quantities, by major command, to divest from FY 2011 through FY 2017. As of early February, more than 5,000 vehicles have been turned in for divestiture throughout the Army.

The projected deeper reductions in soldiers will no doubt increase the number of TWVs to be divested. Leaders and staffs are diligently reviewing projected force models and crunching numbers to determine what the total divestiture requirement will be; meanwhile, it is important that the Army continues to divest in accordance with the published plan. This will move us closer to where we need to be and enable the Army to meet divestiture objectives more rapidly. To quote a famous tactical phrase regarding TWV divestiture, the Army needs to "move toward the sound of gunfire," as the requirement to reduce TWVs is known. Adjustments can be made as better situational awareness is gained, but enough is known now to get started, especially with older TWVs approaching their EUL.

Divesting of unneeded and older equipment has several benefits. At the strategic and operational levels, it reduces the average fleet age and average sustainment costs, since costs associated with maintaining older equipment are higher. At the tactical level, the divestiture reduces unit maintenance requirements that will enable soldiers to conduct other training and missions. It also clears space in motor pools, which are getting increasingly crowded as more and more units redeploy from Operation New Dawn and Operation Enduring Freedom or restation back to the continental United States from overseas locations like Germany and Korea. Units will also reap the benefits of lower fuel and class IX repair parts cost because there would be fewer vehicles in their formations.

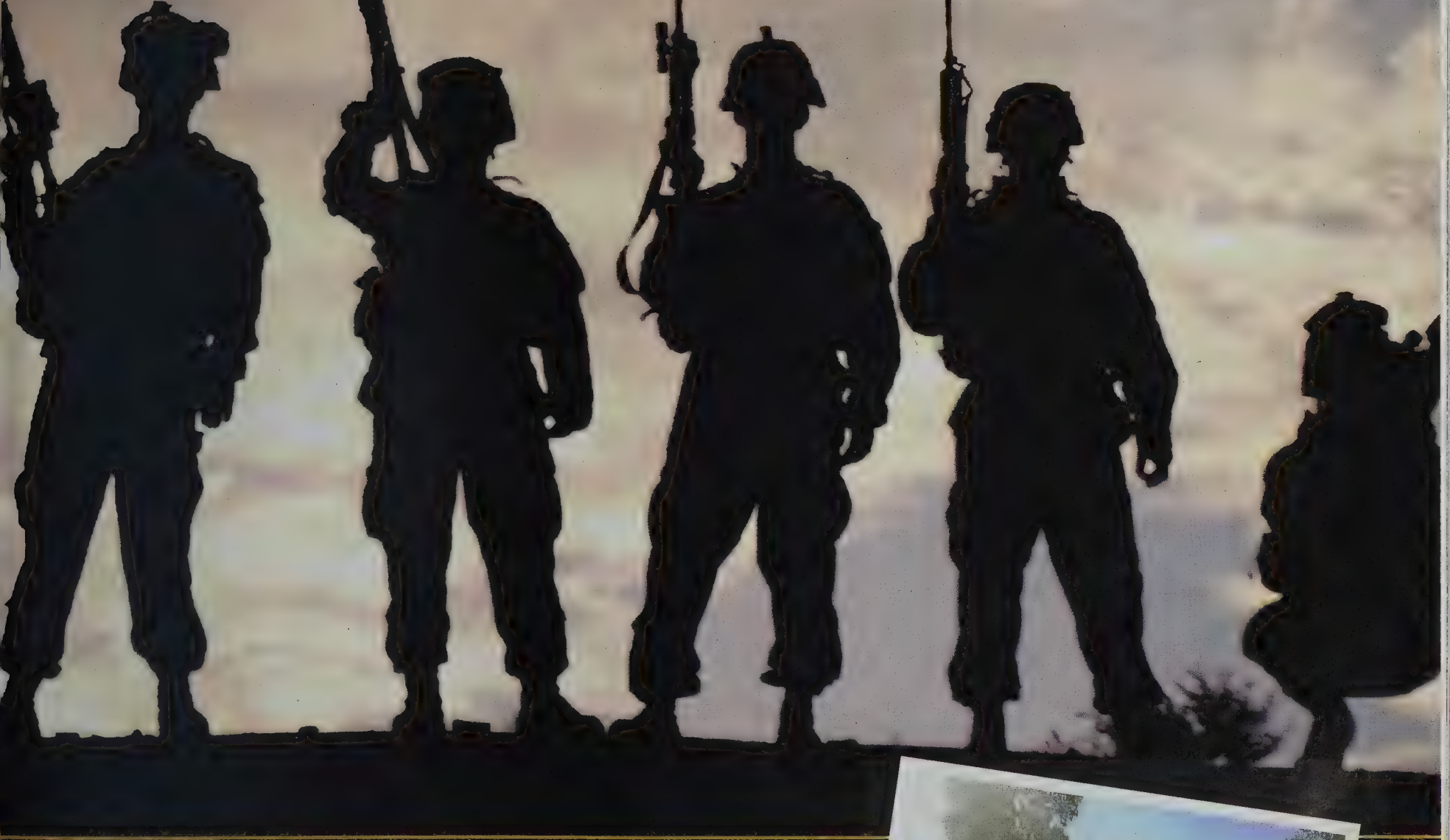
Like most things in life, timing is extremely important. The Army needs to attack the problem aggressively now and continue the fight until the divestiture process is complete and the TWV fleet is balanced with the Army's 2020 requirements. This is a huge task that will take an extended period of time to complete, but one that will not only free up millions of dollars per year but will also buy soldier time, a valuable resource as we make the transition to the postwar drawdown era. Responsible divestiture is absolutely essential to the future success of the Army. ★

USAF/MSgt. Scott Reed

Army National Guard soldiers and Drug Enforcement Agency agents in an M939 5-ton truck conduct search and evacuation operations in New Orleans in the aftermath of Hurricane Katrina.

NATIONAL MUSEUM
UNITED STATES ARMY

Honoring the Army and Its Soldiers



A great Army deserves a great Museum.

The National Museum of the United States Army, scheduled to open at Fort Belvoir, Virginia in 2015 will be the nation's one and only Museum to present the complete Army's history since 1775. Its immersive exhibits, soldier artifacts, and dynamic venues will tell the stories of selfless service and personal sacrifices of the 30 million American men and women who have worn the Army uniform.

For more information on how to support the National Army Museum, visit us online today!

www.armyhistory.org | 1-800-506-2672

Army Mobility Asset

racking System

Photographs: U.S. Army

By William D. (Bill) Jarrett

The U. S. Army and Department of Defense generally ride the technology wave when it comes to deploying capabilities to project combat power globally. Some military logistics operations, however, remain hampered by labor-intensive manual processes and technologies developed in the 1980s and 1990s. The U.S. Army Logistics Innovation Agency (LIA) set out to change that by commissioning a commercial off-the-shelf (COTS) technology exploration project named Next Generation Wireless Communications (NGWC) for logistics applications. The aim was to first determine the state of technology relative to automatic identification technology (AIT) and then to integrate promising state-of-the-art technologies and exploit the results to move military logistics into the 21st century.

The Next Generation Wireless Communications project of the Logistics Innovation Agency (LIA) developed the Army Mobility Asset Tracking System (AMATS), which allows continuous remote identification and location of equipment. (Below) Humvees await retrograde. AMATS consists of GPS-enabled mesh network tags, mesh gateways and a server to track equipment in near-real time. Army Sustainment Command deployed AMATS capability to support the retrograde process for Operation New Dawn (OND).

In simple terms, NGWC is about providing better and more frequent communication with and tracking of valuable assets, equipment and supplies that we employ to project military power around the globe. NGWC was born out of the idea that if tracking tags could communicate with and through other tags, thus forming a network, asset visibility could be extended beyond nodal/choke point reads and into the logistics business processes.

LIA recognized quite early that the major challenges to achieving the desired end state for NGWC were information assurance (IA) compliance and long battery life for tags that would be placed on containers and assets without internal power sources. Connectivity to a smartphone is made possible because the people who use the technology can and will plug in the device to recharge it on a regular basis. Any solution coming out of the NGWC project had to ensure long battery life while also protecting the global information grid.

Very early in the project, LIA focused on ad hoc mesh-networking technology as the potential solution to the problem. A study of more than 80 mesh-networking solutions from commercial and private vendors and academia showed that the state of the technology was advancing, but there was not a single solution designed with consideration for military applications. LIA drove the NGWC project by a very strict set of Army/DoD requirements for IA compliance, long battery life, affordability and reduction in human/soldier workload. By the end of the first year of the NGWC project, LIA determined that while industry was advancing in the COTS chipsets and sensor technology arena, there wasn't an existing protocol that could support the requirements.

In April 2007, LIA conducted the NGWC Capstone Demonstration at Fort Belvoir, Va., to show the power of continuous visibility using a mesh-networking solution to extend visibility beyond nodal. Expanding on the initial demonstration, LIA, in concert with U.S. Transportation Command, developed the Army Mobility Asset Tracking System (AMATS) capability.

AMATS was first used during the Joint Logistics Over The Shore (JLOTS) exercise at Camp LeJeune, N.C., in June 2009. During the Association of the U. S. Army's Sustainment Symposium and Exhibition in Richmond, Va., the deputy commanding general, Army Materiel Command (DCG AMC) was invited to a live remote demonstration of the NGWC mesh protocol. A laptop more than 200 miles from the exercise site provided near-real-time and continuous visibility of containers and equipment being processed during JLOTS, enabling the DCG to watch the buildup of combat power ashore. Within a week, the NGWC team was briefing the DCG and his staff at AMC headquarters.

Since that initial meeting, AMC has been on a deliberate path to deploy the NGWC mesh protocol to provide end-to-end visibility of the retrograde process for Operation New Dawn (OND). In February 2011, LIA, in coordination

---

William D. (Bill) Jarrett is a logistics management specialist with the U.S. Army's Logistics Innovation Agency. He is the project lead for the Next Generation Wireless Communications for logistics applications.

The AMATS deployment (in Kuwait) did not occur until the final phase of the OND drawdown, but it contributed to significant savings. LIA believes AMATS will be a valuable asset in the retrograde from Operation Enduring Freedom in Afghanistan.

with AMC, conducted a proof of principle (PoP) at the Lot 58 wash rack at Camp Arifjan, Kuwait, to show the art of the possible—how the NGWC protocol, while still in development, was already advanced to the point that it enabled continuous visibility (that is, communication) with assets while in a logistics business process. This capability provides near-real-time identification and location of Class VII equipment transiting the retrograde process. Based on the success of the PoP, Army Sustainment Command (ASC) decided to deploy the AMATS capability to support the entire process from the Redistribution Property Accountability Team yard through Camp Arifjan and down to the ports at the Kuwait Naval Base and al Shuaiba. In October 2011, LIA, in direct support of ASC, began the expansion effort to enable the entire process from end to end. The AMATS expansion effort is currently under way with approximately 10,000 mesh tags deployed at those four locations.

In simple terms, AMATS consists of a server, mesh gateways and GPS-enabled mesh network tags. We tagged selected equipment with a mesh tag at the beginning of the process. We then deployed gateways within each segment of the process. Finally a server was set up to manage the data.

Prior to the deployment of AMATS for Phase V of the drawdown effort, the method of attaining location-on-the-ground visibility of assets was manual in nature, requiring significant contractor support. The contractor used a handheld scanner device to interrogate the bar code and then programmed in the lot, row and space number where the asset was parked. This process was labor-intensive, expensive and fraught with human keypunch error. It was also at the mercy of someone moving the asset after it was scanned/programmed. In addition, this method provided no data relative to how long an asset had been in a particular process, much less where its progress was in relation to the overall process.

Today AMATS is delivering continuous location of assets as they move from segment to segment. By geomapping the yard and programming those geozones into the server, AMATS provides actionable information to those responsible for managing the drawdown effort. The AMATS server has been granted an authority to operate from Army Central Command, allowing the AMATS capability to operate in the Non-Secure Internet Protocol Router Network environment. The deployment team is currently working through the interfaces with the Army War Reserve Deployment System and the Global Exchange. This allows AMATS to feed actionable asset visibility data to existing automated information systems used by both ASC and the Surface Deployment and Distribution Command to conduct their missions.

LIA is participating in initial discussions with U.S. Forces-Afghanistan and U.S. Central Command J4 (Logistics) as the strategy for the Operation Enduring Freedom (OEF) retrograde effort is being developed. The AMATS deployment in Kuwait didn't happen until the fifth and final phase of the OND retrograde effort. Still, significant savings were realized, and nonquantifiable efficiencies continue to be identified as ASC becomes more familiar with the technology and the visibility it provides.

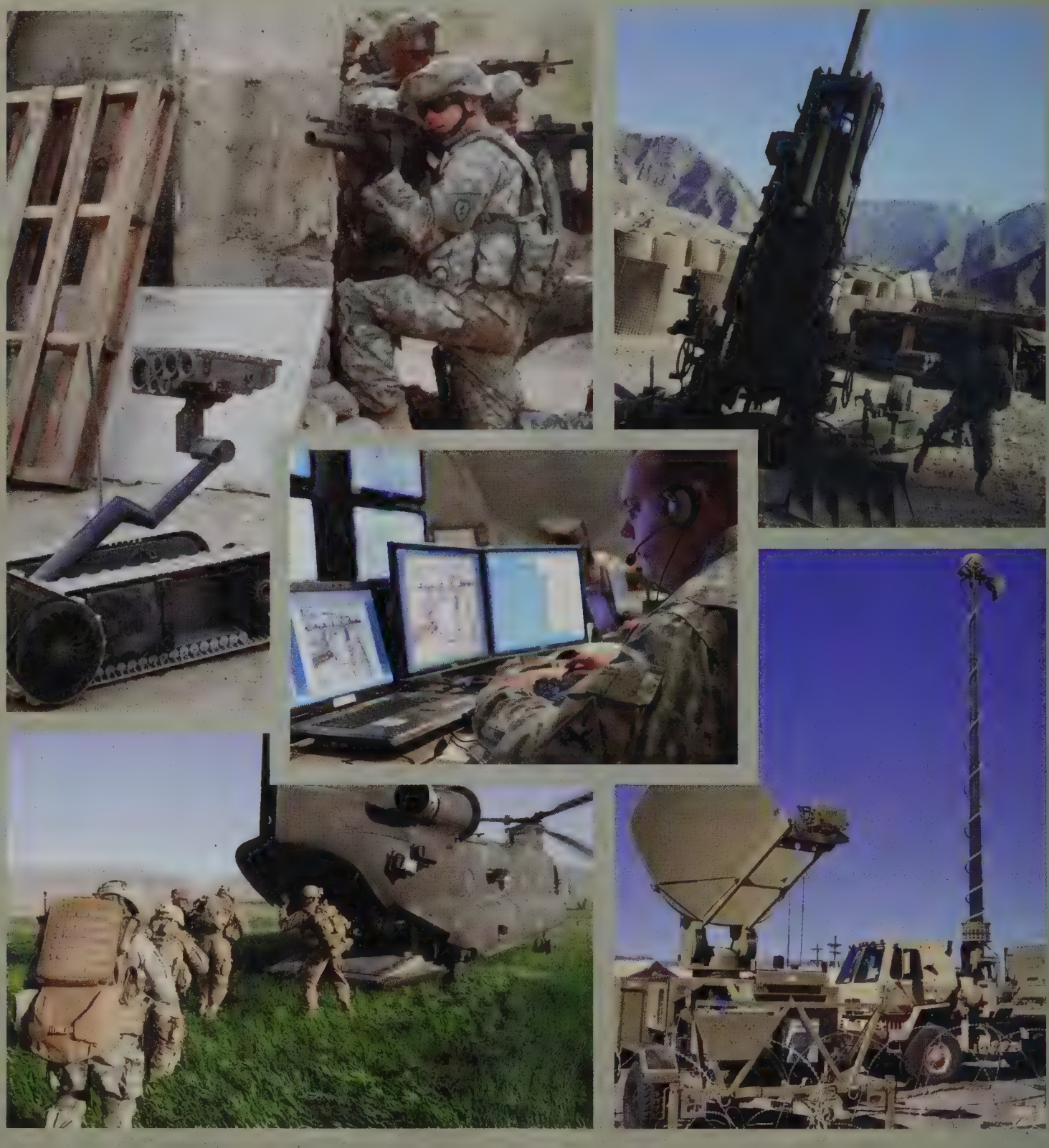
LIA believes that the AMATS capability will have a significant effect on the overall strategy and concept of operations for the retrograde out of OEF. This will aid the Army/DoD in realizing significant savings and streamlining of processes as they plan for the safe and orderly withdrawal of equipment from OEF back to continental United States depots for refit and reset.

The LIA NGWC project was recently selected as a candidate for a fiscal year 2012 joint capability technology demonstration. This will enable completion of the NGWC project and deliver an enterprise-wide, IA-compliant, mesh-networking capability that will enable worldwide asset tracking in support of current military logistics operations. ★

The Association of the United States Army's Institute of Land Warfare

Mission Command Symposium

A PROFESSIONAL DEVELOPMENT FORUM



Photos Courtesy of U.S. Army

MISSION COMMAND AND THE NETWORK

19–20 JUNE 2012

Kansas City Marriott Downtown
Kansas City, MO

Register online at www.ausa.org

FOR MORE INFORMATION CONTACT
AUSA, Industry Affairs: 800-336-4570, ext. 2416

The Energy Calculator: The Fully Burdened Cost Tool

By LTC Gerald E. Silva
U.S. Army retired

The National Defense Authorization Act of 2009 tasked the Secretary of Defense to develop a methodology that figures the true cost to buy and deliver fuel to its final destination. The result of this task is the fully burdened cost (FBC) tool.

The Army Environmental Policy Institute developed the methodology for estimating the FBC of fuel under the Sustain the Mission Project (SMP) in 2005. The Office of the Deputy Assistant Secretary of the Army for Cost and Economics validated the SMP methodology, and then the deputy chief of staff of the Army, G-4, Logistics Innovation Agency (LIA), assumed the responsibility for expanding the capabilities of the tool, distributing it for Army-wide use and standardization, and providing training to users. Since then, the tool has been used Army-wide in support of missions such as planning, logistics, acquisition, research and development, and operations. Originally called the SMP tool, it was renamed the FBC tool as the scope and capabilities expanded to include the fully burdened cost of water.

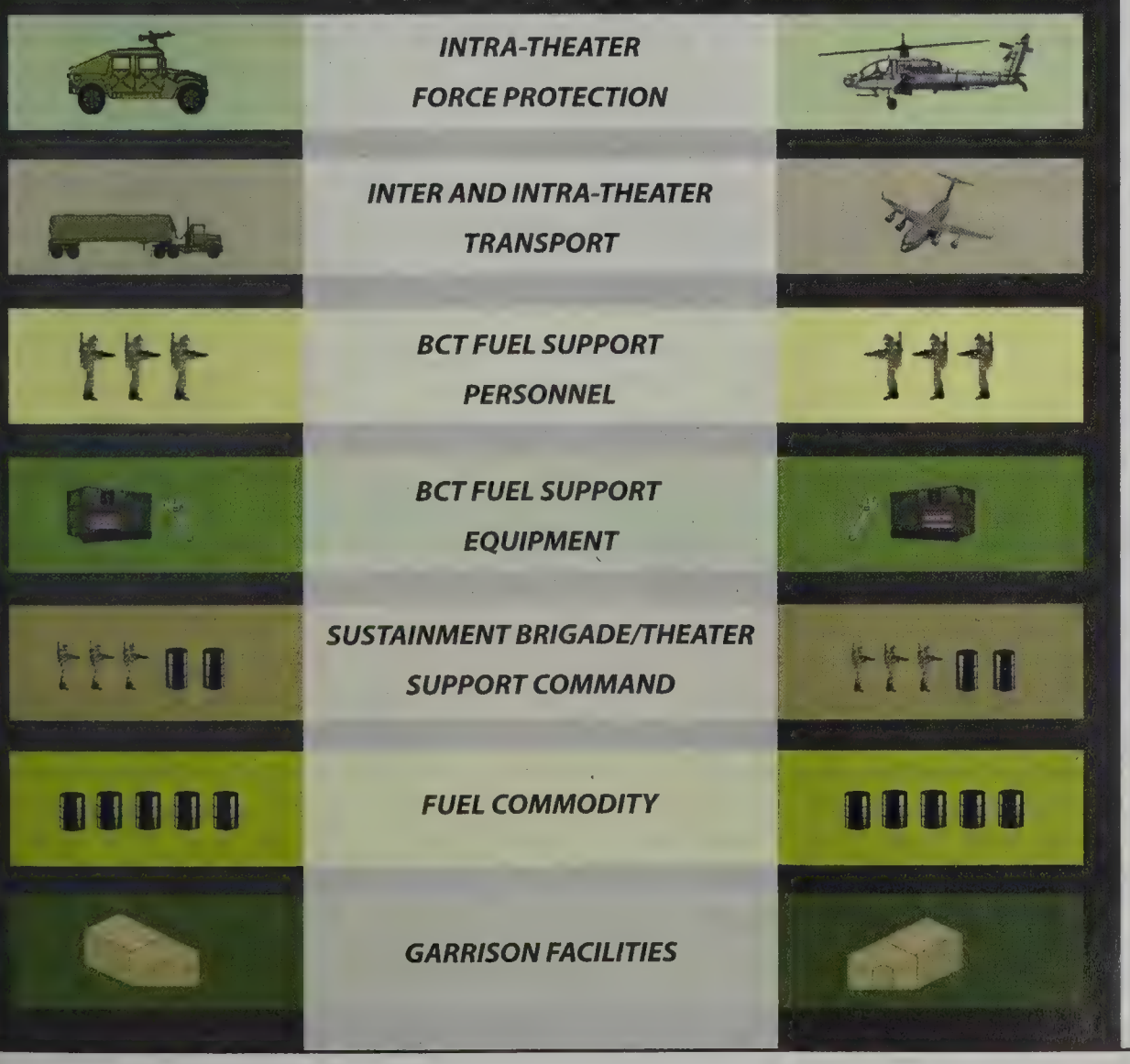
The Reason for the Tool

The FBC tool is an easy-to-use, scenario-based tool that estimates the true cost of supplying fuel and water to the battlefield. An estimated 70 percent of the convoys in Afghanistan and Iraq transport fuel and water. This enormous supply burden is both costly and an attractive target for our enemies.

The first step in better managing the supply of fuel and water is to quantify the costs (monetary and nonmonetary) of different technologies so that they can be compared and

FBC TOOL OVERVIEW

FBC COMPONENTS



COST-BENEFIT ANALYSIS OUTPUT (SCENARIO & FORCE DEPENDENT)

Force Protection & Logistical Impacts (Energy Efficiency as a KPP)
- Fuel resupply convoy soldier threat exposure (hours avoided)
- Fuel Consumption (gallon savings)
- Fuel Supply Truck miles (freed up)
- Gun Truck miles and Aviation System hours (freed up)
- Ground Convoy Equivalents (freed up)
- Potential casualties (avoided)
- Greenhouse Gas and other Emissions (tons avoided)

Fully Burdened Costs of Energy (e.g. $/gallon, $/day)

Energy Technology Investments' Economic Value Added
- Payback period
- Net Present Value

FIGURE 1

TECHNOLOGY COMPARISON EXAMPLE

Equipment A vs. Equipment B | Combat Brigade in an Overseas Scenario (1 year)

	A	B	DIFFERENCE
FBCE Cost for CAB	$109,969,444	$109,473,945	$ (495,499)
FBCE Cost per Gallon	$10.55	$10.57	$0.02
Resupply Convoy Soldier Threat Exposure Hours	145,256	143,885	(1,371)
Fuel Consumption Impacts in Gallons	6,743,258	6,694,381	(48,877)
Force Protection & Logistics Impacts (Mil Air System Hours)	1,219	1,201	(18)
Force Protection & Logistics Impacts (Ground)	1,032,019	1,020,660	(11,359)
Ground Convoy Equivalents	47.00	46.62	(0.38)
Potential Casualty Estimates Total	3.79	3.76	(0.03)
Greenhouse Gas & other Emissions in Pounds	125,143,604	124,108,620	(1,034,984)
Net Present Value based on Net Change in FBCE	$8,019,411		
Force Protection & Logistics Impacts Monetary Total	$322,854		
	TOTAL		

FIGURE 2

used in acquisition decisions. The FBC tool enables this necessary first step. It provides staff officers, analysts and decision makers with a user-friendly analytical capability. In addition, it allows the user to compare different energy technologies.

The 2009 National Defense Act also required that the life-cycle cost analysis for new capabilities include the fully burdened cost of fuel during the evaluation of alternatives in order to modify existing systems and develop new systems that use less fuel. The FBC tool serves this purpose as well.

Methodology and Ease of Use

The FBC tool estimates the costs of energy technology alternatives in wartime and peacetime scenarios. It enables an analysis of energy technology trade-offs using the fully burdened cost of fuel and water as well as other key performance parameters.

The methodology (Figure 1) includes the initial cost to procure fuel and water, and adds to it the cost of equipment, personnel, inter- and intra-theater transportation, force protection, and other costs related to providing fuel and water to a consuming Army unit. It also quantifies the benefits of reducing fuel resupply convoys in terms such as fuel supply truck miles, gun truck miles and aviation system hours (used for protecting the convoys) freed up for other missions.

In addition, the FBC tool includes metrics that reflect changes in operational risk to convoy personnel, soldier threat exposure hours and potential casualties (personnel killed or wounded). For ease of use, there are multiple theater-mission scenarios and force units currently in the tool for the user to choose and customize. It also incorporates examples of energy technology trade-off analyses.

For example, using a preprogrammed scenario for a combat brigade in an overseas location requires only that the user pick that scenario from a drop-down box and view the results. Of course, the tool also allows the user to change many parameters and customize the scenario. Figure 2 displays an illustrative example of a trade-off analysis of two pieces of equipment developed from the information garnered from the tool.

The FBC tool is currently available as an Excel spreadsheet-based tool and will be ported to an Access database environment this year. The Access version will be available to users in early 2013. In addition to the scenario and force-dependent fully burdened cost of fuel and fully burdened cost of water estimates, LIA is working to add the capability to estimate the fully burdened cost of waste. This is the true cost of disposing of waste products from plastic water bottles to batteries.

The FBC tool is for official use only. For more information about the tool visit the LIA Web site at https://lia.army.mil/. ★

LTC Gerald E. Silva, USA Ret., is a logistics program specialist with the Deputy Chief of Staff, G-4, Logistics Innovation Agency.

The U.S. Army Fixed Wing Project Office

By Scott R. Gourley

The raw numbers are certainly impressive: With about 350 fixed-wing aircraft, the U.S. Army has more "planes" than many of the world's air forces. Until late last year, the Army had managed part of that fixed-wing fleet under the Project Office for Aviation Systems, within the Program Executive Office for Aviation (PEO Aviation). That management encompassed only about 250 of those aircraft, leaving approximately 100 Army fixed-wing platforms operating independently by individual organizations and major commands.

The last few years have witnessed a large-scale transition and transformation in the Army fixed-wing community, including fleet restructure through divestitures, realignments and new acquisitions.

In the aftermath of examinations like that of the Vice Chief of Staff of the Army's "portfolio review" process of 2010, senior service leadership directed that all Army fixed-wing aircraft be managed under a single project office. Consequently, in October 2011, the U.S. Army Fixed Wing Project Office was established at Redstone Arsenal, Ala., as the newest and eighth Project Office under PEO Aviation.

The Army Acquisition Executive, Heidi Shyu, published a directive for consolidation of all Army fixed-wing aircraft under that office, according to COL Brian Tachias, the first U.S. Army Project Manager for Fixed Wing Aircraft.

"The consolidation process provides numerous benefits, like centralized management for safety and configuration management of the entire fleet," he said. "Of course, in these times when we are trying to accomplish cost avoidance and cost savings there were also some manpower efficiencies that she wanted to gain."

The consolidation is also affecting costs associated with the maintenance of the Army's fixed-wing fleet by bringing maintenance activities under a smaller number of established contracts.

"So we are taking the lead on that" consolidation, he said. "Our fleet is growing. We started off with 256 aircraft with about 90 people in the office. Now we are growing to about 374 aircraft—as we know it today—and we are working on putting plans together with some of the organizations currently managing those additional aircraft to transfer that management to PEO Aviation. We have until the end of September to work transition of the management to our office."

COL Tachias outlined the spectrum of aircraft involved in the transition, including test aircraft used in support of research and development programs; jump aircraft for the U.S. Army Parachute Team, the Golden Knights; intelligence, reconnaissance and surveillance Special Equipment Mission Aircraft (SEMA); and some of the platforms used by the Joint IED (improvised explosive device) Defeat Organization (JIEDDO) that provide unique warfighter capabilities in theater.

The new project office is involved in more than just maintenance consolidation across the fleets. Examples of new upgrade and acquisition activities range from the modification of six new C12V1s with the latest military communications, navigation, surveillance and aircraft survivability equipment for worldwide deployability to an ongoing procurement to provide the Golden Knights with three new Twin Otter 400 aircraft (as replacements for existing F27 Fokker jump aircraft) to support their recruiting and parachute demonstration missions.

"For the Golden Knights, we're on contract with a company to give us three airframes this year," COL Tachias said. "We're in the process of putting some modifications on those aircraft to meet their unique requirements for jumping, and we are probably 'on glide slope' to deliver those aircraft at the end of this fiscal year."

Other recently acquired fixed-wing platforms include JIEDDO's Saturn Arch, Desert Owl and Radiant Falcon. "Those aircraft are being used to provide support in Afghanistan," COL Tachias explained. "We are currently doing some research and development [and] integration of mission equipment onto the airframes, and then deploying the aircraft to Afghanistan.

"We have another airframe—the Highlighter—that was just transferred to us," he added. "That is a similar type of sensor aircraft that recently was deployed to support operations in theater as well. We also just recently took a look at a couple of Cessna aircraft at the United States Army Military Academy at West Point. Those aircraft, which will be under our management as well, are used to support classes there."

Asked about the biggest challenge to date in standing up the project office, COL Tachias noted the importance of assessing aircraft currently flying. "Of

U.S. Air Force/Sr. Am. Zachary Wolf

Members of the U.S. Army's parachute team, the Golden Knights, jump from a C-31A Troopship aircraft during the Airpower over Hampton Roads open house at Joint Base Langley-Eustis, Va.

course we are applying the Army standards when it comes to safety and configuration management," he said, "so we are really getting out there and taking a look at all the aircraft from an engineering and safety standpoint … . We've had to put together an integrated master schedule to do that."

He noted that the significant growth in these types of program responsibilities has also been mirrored by a small growth in office size "to take management of all these different programs."

C-37A

U.S. Army

Reflecting on continuing challenges over the next few years, deputy project manager Brian Sabourin said, "We are growing in this fiscal climate of nongrowth and even decline. Dollars are tight, and with the transition of these programs we have to transition not only budgets but also contracts and personnel, whether it means 'matrixing' them to our office or actually getting them in our office itself. As you can imagine, there is a lot of political as well as fiscal leveraging going on. So there are challenges right there, and that's just from a programmatic standpoint."

RC-12N Guardrail Common Sensor aircraft

U.S. Army

One early activity that has helped support the programmatic transition was participation in a 2011 professional forum for the entire fixed-wing community. Sponsored by the Army Aviation Association of America, the inaugural forum was held in Huntsville, Ala., several months prior to the formal standup of the project office.

"We were able to bring in the entire community for the first time," COL Tachias said. "That included the SEMA community that deals with the intelligence, surveillance and reconnaissance mission and all of the operational support lift aircraft that do all of the executive transport missions for the Vice Chief of Staff of the Army, Chief of Staff of the Army and Secretary of the Army. Of course they also do a lot of utility missions across the United States and provide support in theater. We even had participation by some of the nonstandard folks, like the Golden Knights, and the test community with some of their aircraft that are unique to their special missions.

"We were able to bring all of those elements under one forum and talk about some of their concerns and their issues," he said, "and at that point [June 2011] they were trying to chart a course for what was good for the Army to bring in as standardization across the fleet. That sort of thing is what really supported the senior leaders across the Army as they came up with these decisions to consolidate all of this under one office within PEO Aviation … to work through issues like the standardization of safety and configuration management underneath one Army standard. So we are working through a lot of that and laying out some of the nonstandard pieces."

COL Tachais added that the process will get the Army to a point "where we are consolidating things like what the cockpits should look like in order for us to minimize the amounts of different training that each pilot has to do and getting us to standard maintenance programs that are going to enable us to consolidate more of those contracts."

As of this writing, a second professional forum for the fixed-wing community is being planned for Huntsville in June.

"There are a lot of good things that are going on right now," COL Tachias summarized. "I think that the biggest takeaway is that by centrally managing these airframes by the Army in one single office we are able to capitalize on cost savings and cost avoidance. Other benefits come from being able to take on a standard safety air worthiness certification program, with the same standard across all of the fleet, and saving dollars by consolidating maintenance contracts."

He continued, "I think that as we move forward in laying out the plans for the fixed-wing strategy for the entire Army, we will be able to chart a course that will allow us to come to some standard airframes. … In our current environment of shrinking budgets we are already able to capitalize on some good ideas that give us a leg up on trying to manage these programs effectively for the future."

"We want to be the Army's fixed-wing 'single voice,'" Sabourin said. "We want to bring to the table those efficiencies that we think we can bring, managing any foreign military sales cases that come around as well, while being prudent with the taxpayers' dollars and supporting our warfighters."

"As we go forward," COL Tachias concluded, "our vision and mission are to continue to provide first-class support to the soldiers through life cycle management of all Army fixed-wing aircraft." ★

Scott R. Gourley, a freelance writer, is a contributing editor to ARMY.

2012 ARMY Magazine Photo Contest

Sponsored by the Association of the U.S. Army

The Association of the U.S. Army is pleased to announce its annual ARMY Magazine photo contest. Amateur and professional photographers are invited to enter.

The winning photographs will be published in ARMY Magazine, and the photographers will be awarded cash prizes. First prize is $500; second prize is $300; third prize is $200. Those who are awarded an honorable mention will each receive $100.

Entry Rules:

1. Each photograph must have a U.S. Army-related subject and must have been taken on or after July 1, 2011.
2. Entries must not have been published elsewhere. Evidence of prior publication of any entry will disqualify it.
3. Each contestant is limited to three entries.
4. Entries may be 300 dpi digital photos, black-and-white prints or color prints. Photographs must not be tinted or altered. (Send digital photos to jwascher@ausa.org.)
5. The minimum size for prints is 5x7 inches; the maximum is 8x10 inches (no mats or frames).
6. A sheet of paper must be taped to the back of each entry with the following information: the photographer's name, address and telephone number, and caption information.
7. Entries must be mailed to: Editor in Chief, ARMY Magazine, 2425 Wilson Blvd., Arlington, VA 22201-3385, ATTN: Photo Contest.
8. Entries must be postmarked by July 31, 2012. Letters notifying the winners will be mailed in September.
9. Entries will not be returned.
10. Employees of AUSA and their family members are not eligible.
11. Prize-winning photographs may be published in ARMY Magazine and other AUSA publications three times.
12. Photographic quality and subject matter will be the primary considerations in judging.

For further information, contact Jocelyn Wascher (jwascher@ausa.org), ARMY Magazine, 2425 Wilson Blvd., Arlington, VA 22201; (703) 907-2604.

For examples of past winners, see www.ausa.org/publications/armymagazine/aboutarmy/Pages/ARMYMagazineAnnualPhotoContest.aspx

The National Park Service's Corinth Civil War Interpretive Center at Corinth, Miss., offers an overview of the area's Civil War history, including the siege of Corinth and the preceding Battle of Shiloh/Pittsburg Landing. At top, a relief sculpture decorates the center's entrance. Above, one of the center's displays explains the western theater's strategic situation in 1862. Right, another display depicts the construction of Corinth's defenses. For more information, see www.nps.gov/shil/historyculture/corinth.htm.

The Siege of Corinth

The Union Takes A Ghost Town

Text and Photographs
By Dennis Steele
Senior Staff Writer

The savage two-day battle at Shiloh/Pittsburg Landing left the public stunned—more so on the Union side because the battle tended to initially be viewed as a defeat because of the fusillade of negative and fault-finding Northern press reports printed in its wake.

As historian James M. McPherson put it, "Although Grant had snatched victory from the jaws of defeat at Pittsburg Landing, northern opinion at first focused more on those jaws than on victory."

The casualty count alone was shocking news—13,047 for the Union (1,754 killed, 8,408 wounded and 2,885 missing) and 10,699 on the Confederate side (1,728 killed, 8,012 wounded, and 959 captured or missing). It was the bloodiest battle fought up to that point in the war, but it would be exceeded by several more to come.

Both sides claimed victory, and commanders on each side would be faulted in the foggy aftermath: MG Ulysses S. Grant, commanding the Federal Army of Tennessee during the battle, immediately; and eventually GEN Pierre Gustave Toutant Beauregard, who had assumed command of Confederate forces at Shiloh when GEN Albert Sidney Johnston was killed.

A small sculpture of a Civil War hat is displayed on the center's grounds.

At right, a window provides a view of replicated defense works from inside the Corinth Civil War Interpretive Center, and, below, a soldier's cap is one of the many small sculptures that serve to recall the scene of the battle.

A ground-level sculpture depicting dropped equipment sits beside the walkway to the Corinth Civil War Interpretive Center's main building.

The weight of Union blame—centered on the Confederates' surprise attack and the Federals' lack of defenses—landed on Grant; however, he survived calls to replace him thanks to the support of President Lincoln. Nevertheless, during the follow-on operation to take Corinth, Miss., Grant would be removed from field command and relegated to serving as deputy to MG Henry W. Halleck, commander of the Department of Mississippi, who took personal command during the Corinth attack.

A strategic railroad center, Corinth was less than 25 miles away from the Shiloh battlefield by road. Halleck, cowed by the backlash from the Shiloh battle, was determined not to be vacuumed into the same situation as Grant—blamed for a lack of defense and battered by a Confederate attack.

Halleck planned a conservative, deliberate and slow approach to Corinth—a siege that ground down to a crawl and embraced Roman tactics. At the end of each day, he had his forces build defense works, then stand-to the next morning, braced for attack. The result was that it took three weeks to bring his army into artillery range of the city.

Halleck was further crippled by exaggerated intelligence estimates of the enemy, much of which was planted by Beauregard, who briefed soldiers on what he wanted the Yankees to believe and sent them to be captured and relay the falsehoods. He went further by using empty trains, which pulled into Corinth to orchestrated cheers, to make the Federals believe that he was being reinforced, and he had logs painted black and emplaced to make it look as though he had many more cannons than he did.

Beauregard had built strong defense works around Corinth, but they enclosed a cesspool. Living conditions for the Confederate forces deteriorated into an ugly, disease-infested mess. About the same number of Confederates who died at Shiloh succumbed to disease at Corinth. As the situation worsened and the Federals inched closer, Beauregard decided to abandon the city.

He continued to employ deception to cover the withdrawal, still using train traffic to imply reinforcement, but the trains carried the sick and wounded, along with heavy guns and supplies. Finally, he deceived his own men—supplying them with three days of rations and issuing false orders for an attack the next morning. Deserters, this time, carried the misinformation to Union lines.

Instead, withdrawal orders were issued during the night, and the last of the Confederates marched away on May 29, 1862, covering the movement by leaving all campfires burning, a skeleton force that created displays of force for Union observers, and drummers who beat out commands to regiments that were no longer there. Most of the civilian population left, too.

Halleck's patrols crept into Corinth the next day unopposed and found only the squalor and wreckage that the Confederates had left behind. ★

CompanyCommand

Building Combat-Ready Teams

To: Platoon- and Company-Level Leaders
From: Experienced Platoon Leaders

The Platoon Leader-Platoon Sergeant Relationship

The relationship between a platoon leader and platoon sergeant can make or break a unit. As platoon leaders, our relationships with our platoon sergeants can often feel like arranged marriages: We don't get to choose our partner, but we sure do have to make the relationship work, not only for the sake of the "kids" (our Soldiers) but also for "the community" (our company and battalion). Complicating things, the PL-PSG relationship typically involves a relatively inexperienced commissioned officer leading a much more experienced noncommissioned officer.

To gain greater understanding of the platoon leader-platoon sergeant relationship, more than 200 first lieutenants commissioned in 2009—all of them current or past platoon leaders—shared their experiences of working with their platoon sergeants in a January 2012 survey in the Platoon Leader Forum. These lieutenants' responses, excerpted here, highlight both the diversity and significance of their PL-PSG relationships.

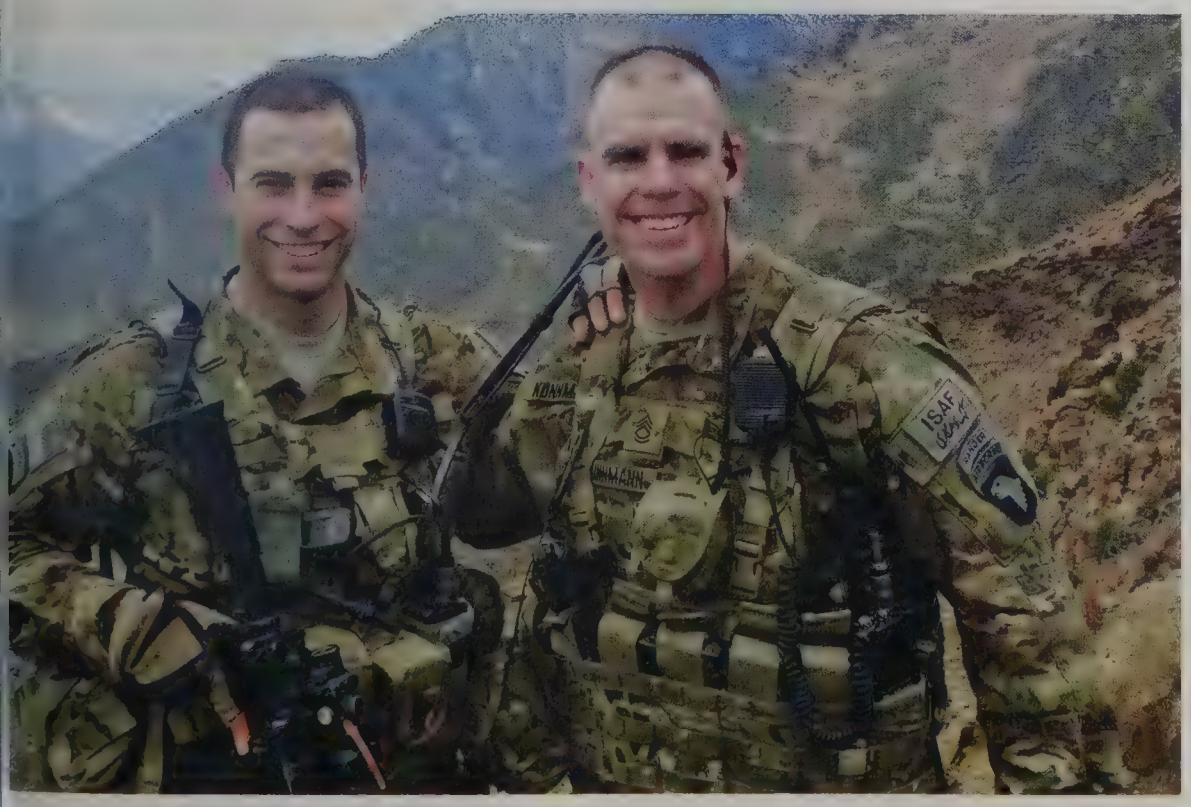
Assessing the Relationship

Our relationship was awesome. One has to be the enforcer, and that responsibility lies within the role of the NCO. My first PSG was a standards-enforcing machine. That made it much easier for me to perform my duties and all the additional duties that my company gave me. At times, however, my PSG even had to enforce the standards on me. Some officers get really offended when NCOs do that, but just because you're an officer that doesn't place you above the standards. **—1LT, EN**

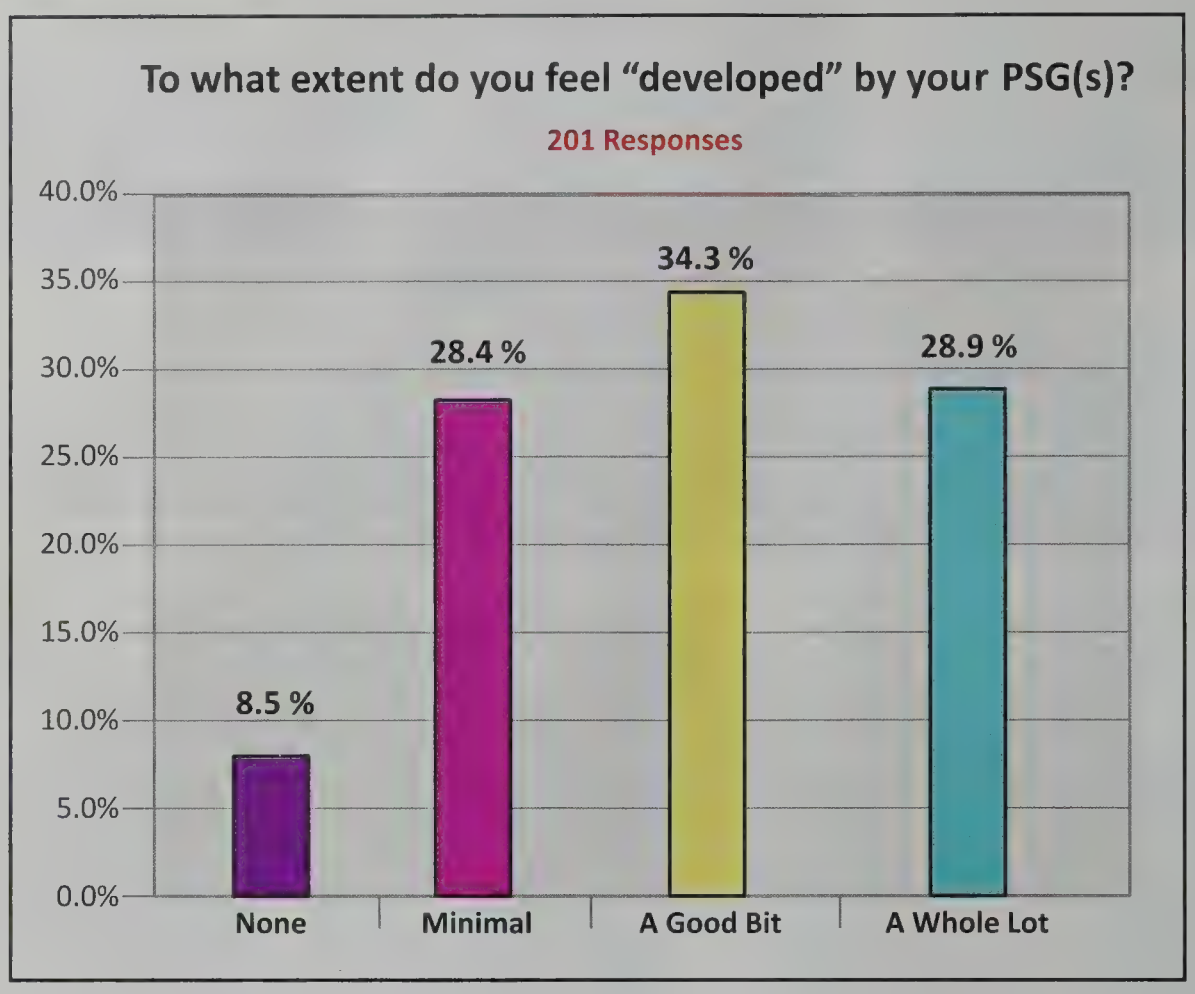
Our relationship was horrible. My platoon sergeant was someone who was stuck at E-6. He basically held the position because of a shortage of NCOs in the unit. I learned a lot from the operations sergeants during this time, mainly about how to deal with a delinquent and incompetent PSG. It was a terrible relationship and terrible introduction to the NCO Corps. To this day, I micromanage more than I should, and it is all because of my first PSG, whom everyone said to trust wholeheartedly but was crap and not worth a minute of my time. **—1LT, MP**

Our relationship was difficult. I had a PSG who had been a PSG for three years, and the two previous platoon leaders were weak leaders. It was difficult getting the PSG to let go of things she shouldn't have had to do in the first place. **—1LT, SC**

My platoon sergeant was an aggressive, stubborn man, but he truly cared for our Soldiers and worked himself to the bone for them. He didn't spare me either, and his development furthered my leadership skills and taught me about NCO-officer dynamics. We never had a real argument, but always managed to hash things out diplomatically. We brought up any issues we had with each other immediately—away from the troops—and resolved them.



1LT Alex Pruden and his platoon sergeant, SFC Thomas Kunnmann, led 3rd Platoon, Company C, 1-327 Infantry Regiment in Afghanistan.



From day one, he was always telling me to stay out of his lane, which is extremely rare among the platoon sergeants I've seen. Too many will allow a young, inexperienced platoon leader, fresh with ambition out of BOLC, to dive right in and wear himself out doing the job of his NCOs. My first PSG took care of the Soldiers, drove and developed the NCOs, and kept me out of trouble. I couldn't have asked for any better. **—1LT, IN**

My first platoon sergeant was amazing. I met my first platoon about halfway through their deployment. The platoon hadn't had a platoon leader since the beginning of the deployment; the PSG had been filling both roles. He was a very knowledgeable, professional NCO, yet also a very humble man. As soon as I arrived, he took me under his wing. I explained to him that I knew doctrine and what I had learned in school and in training, and that I knew he had the practical experience, so I wanted to learn whatever he could teach me. Immediately we clicked and developed a very close working relationship. We learned each other's strengths and weaknesses and divvied up tasks accordingly. We had our disagreements but always in private, and at the end of the argument if we could not reach an agreement, he would defer to me and issue guidance as if it were his own. All in all, I was incredibly lucky. **—1LT, MS**

My PSG was controlling. He ran the platoon in garrison, and I, as a new LT, was expected to follow and observe. That was good for the first three months, but as a leader I had to step up and take control to let him know that I was not his student—I was his partner/leader. **—1LT, CM**

We had a great working relationship because we each understood our doctrinal roles. He handled all the administrative issues and I handled all of the planning. He also had the ability to step in and assume the role of platoon leader if I had to be pulled away for something. The relationship worked because he valued my contributions to the platoon and recognized that I was ultimately the ground force commander; he never undermined me, even when he disagreed with me. If he did have an issue with something I put out, he would always address it with me offline instead of putting out contradictory information. The key to our success was always being a unified front, whereby he would ultimately support the decisions I made and I would always seek his input before making them. **—1LT, IN**

Our relationship was a work-only relationship. It started off well and then started going a little sour. I made several mistakes when I first became PL. The first one was allowing several people within the platoon and company to talk negatively about him. That changed my whole outlook and perception about him. I never gave him a fair shake or a clean slate as I should have. So before I ever met him, I was already looking for him to be lazy, not proactive and everything else that comes along with those preconceptions. The second mistake I made was trying to be a squad leader instead of the PL. **—1LT, QM**

What is the most important lesson you learned from your PSG?

- Confidence and aggressiveness.
- How to talk to NCOs as professionals.
- To be clear in orders and to require back briefs to ensure the orders are understood.
- How to talk to my company commander and make suggestions.
- How to manage time and expectations and to delegate tasks.
- Training and taking care of Soldiers.
- Accountability of property.
- To trust my subordinates.
- Patience and the division of tasks.
- An understanding of where Soldiers come from and the hardships that they encounter.
- That people are always watching—always!
- That good new lieutenants come from good platoon sergeants who are willing to mentor their PLs.
- Not to startle him in the middle of the night! I tried to spook him one night and he came out of the rack like a bear that had been shot by a .22. Man, was he grumpy!

A CompanyCommand Glossary

1SG First sergeant
ADA Air Defense Artillery
AR Armor
BOLC Basic Officer Leadership Course
CM Chemical
CO Commanding officer
EN Engineer
FA Field Artillery
FOB Forward operating base
IN Infantry
KLE Key leader engagement
LFX Live-fire exercise
LT Lieutenant
MP Military Police
MS Medical Service
NCO Noncommissioned officer
OPORD Operation order
PLT Platoon
PT Physical training
QM Quartermaster
SC Signal
SFC Sergeant first class
TC Transportation

We eventually had a great relationship, but it took a long time to build rapport because her previous PL had never been around and hadn't taken the time to work on their leader relationship. She thought I would be the same, but when she saw I was around, interested and cared about Soldiers, she started to warm up to me. **—1LT, MS**

He was exasperating at first. It took time for me to develop a relationship with my PSG. He was an old-school SFC who had been deployed seven times and had seen everything under the sun. I was just another cherry LT he had to deal with. He was outstanding at what he did and he knew it, but he trained me well and eventually, over time as I learned, he began to accept me as the PL. At first, however, he did not. **—1LT, TC**

Constructive but critical. I am not sure if my first PSG had had very good PLs before I arrived. He was very guarded and distant, as though I were about to order the entire platoon to their doom, but after a while, he and I got to know each other well enough to understand where we both were coming from. He realized that I was on the up-and-up and had the best interests of the platoon in mind. **—1LT, EN**

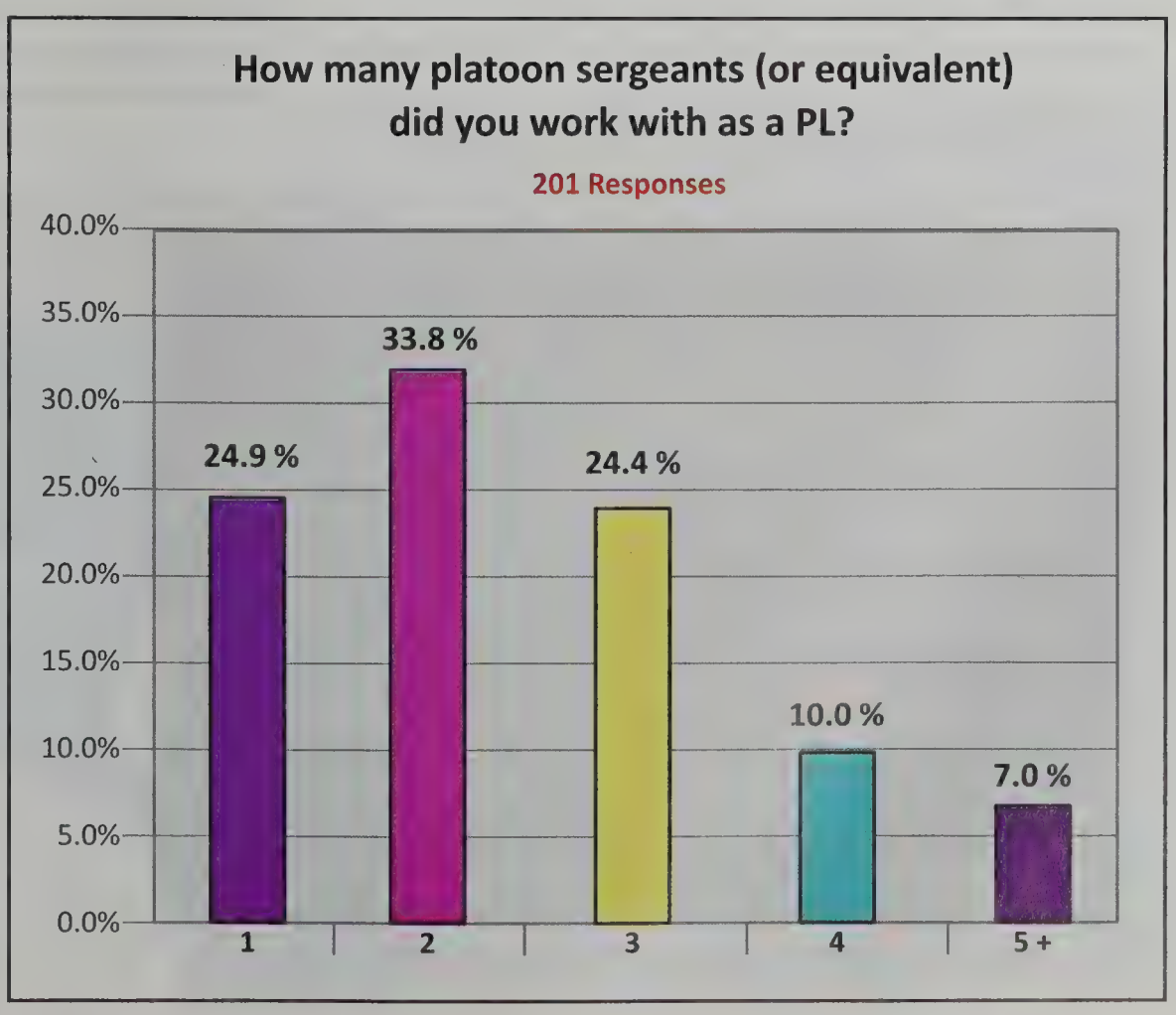
The relationship was professional but tense. A seasoned SFC, he had been wearing two hats as both PL and PSG for seven months before my arrival. He was eager to have a LT but somewhat set in his ways, and as we rapidly transitioned to deployment we were frequently at odds with one another, but always behind closed doors. We maintained a professional front to subordinates and higher. **—1LT, AR**

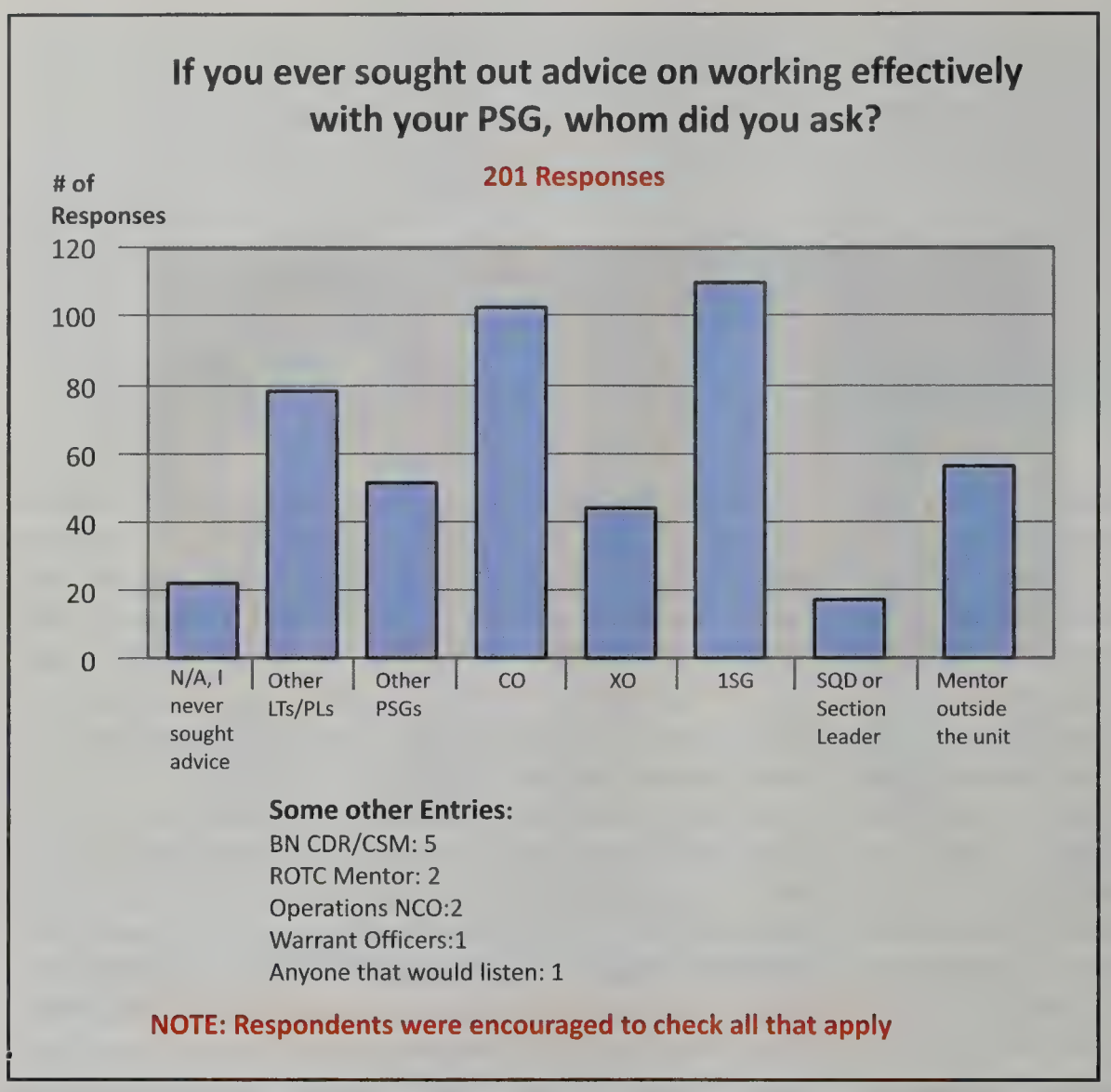
He was willing to work with me and let me feel out things before giving me all the answers, but not in a "holier than thou" kind of way, just in a "I'm here if you need me" sort of way. He was very involved with the NCO squad leaders and pretty much ran the platoon with them. **—1LT, ADA**

Fantastic! Ideal! He was an old, seasoned, experienced PSG with multiple combat tours in Iraq. I intentionally say *combat tours* vice *administrative tours*. He was the NCO you expect to get as you leave the basic course. There were some flaws, of course, but they were easy to overlook when compared with his total body of work and effectiveness. He was supportive, gave counsel and led the Soldiers. We were a team. It was a professional relationship, but it was also personal. I wouldn't say that the latter is necessary, but cultivating a solid, personal relationship with your platoon sergeant is a huge combat multiplier. **—1LT, EN**

Not very good. Being a young 2LT, I took the advice of my many mentors before I commissioned and didn't want to step on my PSG's toes. My mistake was I didn't outline my expectations of him well enough. He was so weak that I ended up relying on my other NCOs to get his job done and basically ignored him, which resulted in failure. **—1LT, FA**

Our relationship became extremely good when we finally synced. Initially, it was difficult because officers are taught to come in and take charge. However, our conflicts dissolved later as I allowed my PSG and NCOs the autonomy to complete the tasks I gave. Essentially, my trust in them established my leadership of the platoon because we became mutually invested in a common project. **—1LT, AR**





Stories about Platoon Sergeants

My first day as a PL, I sit with the PSG and before I even say hello, he looks at me and tells me, "Your lane, you plan. My lane, I execute. You plan, I execute. As long as you understand that, we will get along just fine. If I fail, you fail. I will not let you fail." And he didn't—ever. **—1LT, EN**

I was out on patrol with my platoon in Afghanistan. We were doing a KLE with some local villagers. I had a question about protocols and stepped away from the huddle with the village elders to consult my PSG. He looked me square in the eyes and said, "Sir, that's your deal. You run it how you want to run it." Rather stunned at the blatant lack of willingness to give any input, I returned to the village elders and carried on as best as I saw fit. Later, after we returned to the FOB, I consulted my CO about the incident. His response was, "Just deal with it, LT." Moral of the story: There may be great working relationships between PLs and PSGs out there, but there are also terrible ones. Be prepared and creative enough to run the show entirely on your own. You may not have any support in your local chain of command. Roll with it, as I did, and do the best you can. Ultimately, the PSG owns the platoon, so if it comes down to changing the PL or changing the PSG, it is going to be the PL who is changed. **—1LT, IN**

My PSG had been hospitalized with pneumonia two days prior to a platoon live-fire exercise when we were preparing to deploy. Instead of following his profile, and against the guidance from the company 1SG and myself, he was there at the LFX to lead his platoon from the front. He not only endeared himself to his subordinates, but he also set the example for his younger NCOs to emulate. His dedication to his craft and his Soldiers showed me that there are true professionals still within our ranks. The moral of the story is not that he disobeyed his profile and came to work, but instead that he realized his men needed him and he executed like a warrior. In war, the enemy will not let you take a sick day, and my PSG realizes this. He was (and always will be) the epitome of what an NCO should be. **—1LT, IN**

My first PSG was lazy. We would arrive at the field ready to execute a mission but would be lacking supplies. He was a nice guy but was not aggressive enough to move Soldiers into action. He was not motivating during PT because he was usually the first one out of breath. My second PSG is a "beast." Sometimes I give her a list of what needs to be done and it has already been done or she already has a plan in place. We are on the same page on

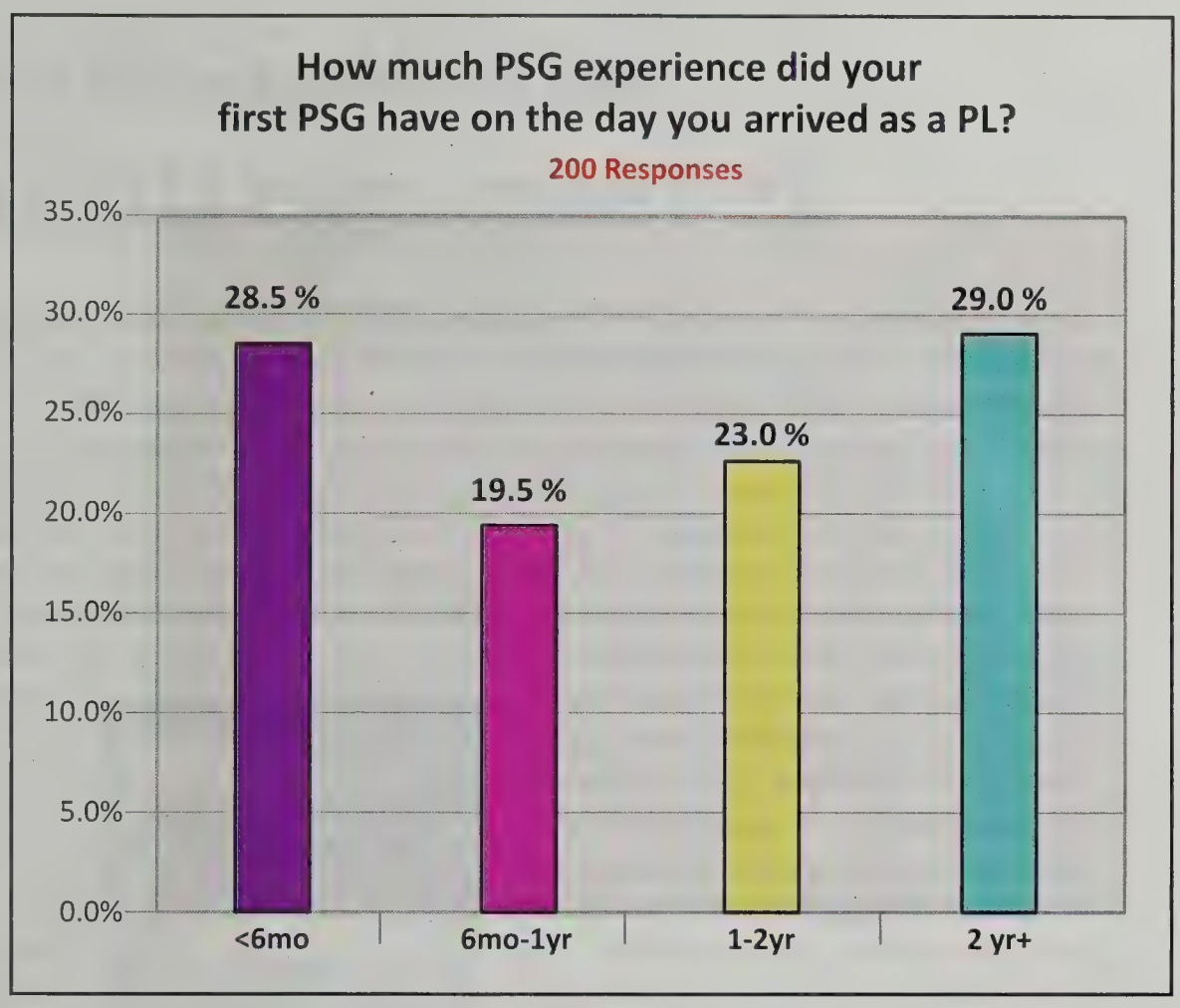
1LT John Gresham (left) presents a plaque to his first platoon sergeant, SFC Adam Farmer, upon Farmer's departure for the scout platoon. At right is SSG Marcos Colon, who subsequently served as platoon sergeant until a new sergeant first class arrived in the unit.

what we want our platoon to be. She is aggressive, loud and gets things done fast. **—1LT, CM**

I arrived at my PLT when we were in garrison for an extended period of time, when there isn't a whole lot to do for a PL except plan PT, keep the commander abreast on your PLT's issues and supervise maintenance. So my PSG ran the show. Before we went on our first field problem, my PSG recommended I hold a PLT meeting and explain to the Soldiers that when we left garrison and went to the field, I would be running the show. One night we were conducting an Unstabilized Table XII gunnery (PLT-level gunnery, in Humvees). Before I briefed my OPORD, I ran the plan by my PSG and he provided his advice, based on his real-world experiences. I listened to him, and the modifications we made to my original plan landed us the top performance awards for mounted maneuver, dismounted maneuver and room-clearing procedures. **—1LT, AR**

On deployment, my platoon usually worked in split sections, so my PSG and I often did not see each other for several days at a time. When we were back, we'd get some food and catch up on what had happened with the other section. It served as an outlet for frustrations developed over the patrol cycle, helped keep each other aware of potential issues within the platoon and served as a debrief. It helped us maintain a higher level of awareness and strengthened our working relationship. That time spent talking was interspersed with stories about "Joe," gripes about the commander, family, etc. **—1LT, IN**

One cold winter day, the platoon was getting ready to spend six hours in a convoy simulator. The simulator was fairly high-tech, effective and difficult to reserve. Since we were running a support platoon in a combined arms battalion, this was training the platoon really needed. About three-quarters of the Soldiers showed up on time, and we were all waiting for the civilians to brief us. Both my PSG and I started getting fairly upset that we had quite a few missing Soldiers. He and the squad leaders got them on the phone, and they all seemed to show up at the simulator at the same time, 15 minutes late. They were "smoking and joking," slowly making their way up to the door. My PSG shot out of the building and shouted, "Hurry the [heck] up! Run, now! Why the [heck] are you late? Get in here and sit the [heck] down!" All of the Soldiers ran inside faster than I had ever seen them move. When they passed, my PSG was fuming, red in the face, veins in his neck and face bulging. … As soon as they got inside, he stopped and lost his scowl. He turned to me, winked and smiled, and walked into the building. **—1LT, TC**



For better or worse, junior officers' experiences with their platoon sergeants affect their platoons and shape their attitudes towards NCOs and the Army. Do their thoughts ring true to your experience? The Platoon Leader (http://PL.army.mil) and Company Command (http://CC.army.mil) online professional forums bring together company-level officers—past, present and future—who are committed to becoming more effective leaders, growing combat-effective units and advancing the Army profession. If you are a commissioned officer, we invite you to join the conversation. Cadets are eligible to join the PL forum.

AUSA Sustaining Member Profile

Zel Technologies LLC (ZelTech)

Corporate Structure—Founded: 1988. Headquarters: 54 Old Hampton Lane, Hampton, VA 23669. Telephone: 757-722-5565. Web site: www.zeltech.com.

A long tradition of outstanding service to our men and women in uniform is evident as one begins to examine the ethos at ZelTech. More than 23 years ago ZelTech CEO, Col. Jack Ezzell Jr., U.S. Air Force retired, laid the groundwork for success as he founded the small consulting firm known as Zel Technologies. In 1995, he was joined by Brig. Gen. James F. Grant, U.S. Air Force retired, the current ZelTech president. Together they built ZelTech into a successful multiservice and multifaceted organization with core capabilities that span defense intelligence operations; information assurance; homeland security; modeling, simulation and training; engineering; information technology; and professional services support. The veteran- and minority-owned small business is headquartered in the downtown historic district in Hampton, Va., with corporate locations in Orlando/Winter Park and Melbourne, Fla.; and on-site support personnel at more than 30 locations in the United States, Korea and Japan.

A New Modeling, Simulation and Training Focus

ZelTech began modeling and simulation support to our nation's ground forces in 1996. Later a recipient of the Army Program Executive Office for Simulation, Training and Instrumentation contract (STOC II), ZelTech made the commitment to grow its training and simulation capabilities, initially in live training. The Live Training and Simulation Group is focused on delivering robust solutions to some of the most challenging training systems for new and existing simulation training systems—and doing so in a quick and efficient manner.

The group understands the urgency in solving live-training problems and getting solutions into the hands of soldiers quickly. Its capabilities include tactical force-on-force training, force on target, range instrumentation, battlefield effects and system service life extensions. The group also provides operational and theater-level simulations, and offers innovative communications, power, simulation and other technical solutions through its internal R&D efforts. One year ago, ZelTech expanded its operations in Florida by opening an office that supports the simulation and training community.

Consulting and Service Support

ZelTech was quickly recognized as a leader in its field, consistently delivering exceptional systems engineering and process solutions, subject matter expertise, analytical and technical support, and program management skills to the Department of Defense, NASA, the intelligence community, and federal, state, and local homeland security activities. The ZelTech team has become known for leading-edge technologies, state-of-the-art systems and battle-tested processes to help modernize military command and control and intelligence, surveillance, and reconnaissance (ISR) operations, and to protect the physical and information infrastructures of the United States. The team provides dedicated systems engineering and intelligence support to national agencies and military operations around the world.

Intelligence Services. A trusted partner in the intelligence community, ZelTech provides support to national agencies and combatant commands conducting military operations worldwide, with emphasis on measurement and signature intelligence and human intelligence disciplines. The company provides support in all phases of the R&D process from basic research to the transition of new technologies into operational capabilities. ZelTech has also been a major player in efforts to enhance intelligence preparation of battlespace analysis and processes and improve predictive analysis in support of military operations. The ZelTech team provides impeccable service to the agencies and organizations that our nation relies upon to keep America safe.

C4ISR. As a leading provider of command, control, communications, computers & intelligence, surveillance, reconnaissance (C4ISR) services, the team's operational and tactical-level air and space operations expertise spans numerous Air Force, joint and national agency customers. The C4ISR team develops, demonstrates, and validates new and emerging technologies and refines tactics, techniques and procedures for infusion into current and next-generation operational systems. Support includes technical liaison and expertise in air/space battle management planning and execution, time sensitive targeting, cruise missile defense, intelligence preparation of the battlespace exploitation, R&D, and test and evaluation of air and space C4ISR systems.

Community Outreach

While ZelTech has been building successful, multifaceted organizations that serve our warfighters, the workforce hasn't forgotten its responsibility to give back to the neighborhoods where they work and live. That "culture of care" starts right at the top with CEO Jack Ezzell. From its support to the Hampton Technology Laboratory (where their team operates a computer learning facility educating children and senior citizens on using computer hardware, software and the internet) to its generous resource contributions (via volunteer work and financial support), the ZelTech team contributes to communities and professional associations. ZelTech is a dedicated corporate and sustaining member of AUSA and a diligent supporter of AUSA's values to serve soldiers, retirees, families, civilians and the Army family.

Soldier Armed

Recon Scout XT

By Scott R. Gourley

A mid-February announcement of a U.S. Army Rapid Equipping Force (REF) order for 1,100 Recon Scout XT micro-robots from ReconRobotics should soon translate to an expanded tactical observation and surveillance capability for U.S. warfighters. The announcement, which follows similar REF procurements in August 2011 (385 Recon Scout XTs plus additional equipment) and October 2011 (315 Recon Scout XTs plus additional equipment), sets the stage for development of new tactics, techniques and procedures while providing a greater soldier appreciation for so-called throwbot designs.

In addition to the ongoing fielding to U.S. Army units, some quantities of the system have previously been fielded to other Army agencies and other DoD service/special operations elements. (The Army's Asymmetric Warfare Group reportedly bought its first prototype systems in 2009 with the REF buying its first models the same year.)

The Recon Scout XT enables users to conduct video reconnaissance in cluttered indoor environments as well as outdoor landscapes of dirt, sand and rocks. The system is composed of two elements—a robot and a handheld operator control unit—with a total system weight of 3 pounds. The robot element is 8 inches long and weighs just 1.2 pounds, making it extremely easy to carry. It is equipped with a video camera and infrared optical system that automatically turns on when the ambient light is low, broadcasting a clear visual signal back to the operator control unit under all lighting conditions.

The unit can withstand up to 1,600 Gs of impact, roughly translating to the ability to be thrown up to 120 feet. Equipped with large motors, powerful drive trains and an aggressive wheel design, the Recon Scout XT provides the speed, power and maneuverability needed to gain mission-critical reconnaissance across a variety of terrain.

According to Ernest Langdon, Director of U.S. Military Programs at ReconRobotics, early warfighter applications in theater have involved the system primarily used "as a method to create 'standoff,' if you will, between users and potential danger. By that, I mean you can imagine its use any time you're in a situation where you don't want to stick your head over a wall, around a corner, or you don't want to walk right next to that vehicle. Since the device is 'throwable' it allows you to throw it over a compound wall so you can see what's happening on the other side, throw it into the next room, throw it down the street to look under that car, or lower it down into a cave to take a look around. And you can do all of that before you expose yourself. That's what they are using it for."

"They are also coming up with creative ways to use it as well," he added, offering the example of attaching it to canines as "a hasty dog camera."

The low-light infrared-capable camera relays reconnaissance information back to the operator as a black-and-white image on the 1.8-pound operator control unit. Immediately below the screen is a single toggle control that is used to drive the device once it has been thrown.

ReconRobotics

The mobile Recon Scout XT microrobot weighs only 1.2 pounds, can be thrown up to 120 feet and offers soldiers instantaneous video feedback from inside structures as well as outdoor areas composed of rocks, dirt and sand.

The 8-inch-long robot is equipped with a video camera and infrared optical system that turns on automatically when ambient light is low. It is also equipped with a 100-foot tether for easy retrieval.

One additional system tool that has been included in some of the recent REF procurements is the "search-stick" device. Langdon described it as a "pole that collapses to about 20 inches in length and extends to just a hair under 6 feet. It has articulating jaws on the end to hold the robot, so now you can take that robot and use it as you would a pole camera."

A release control on the bottom of the search-stick allows the robot to be dropped through windows or into other spaces accessed by the pole extension.

"A 6-foot-tall man with an extended arm can reach a height of almost 15 feet with this," Langdon said. "Maybe you don't want to throw the robot somewhere for various reasons. This gives you a lot more options as far as taking a look at something."

Another small interface attaches the robot to a weapon bayonet mount, allowing an operator to "see" around a blind corner while remaining immediately ready for tactical engagement.

ReconRobotics was initially formed in 2006 to commercialize robotics technology developed at the University of Minnesota Distributed Robotics Laboratory under funding from the Defense Advanced Research Projects Agency, and by 2008 the company was participating in a micro-throwable robot program.

"They had very specific requirements based on an identified environment," Langdon explained. "There were things like 1-inch rock aggregate [surfaces], 2-inch thresholds between rooms, loose clothing on the floor and sand. They said, 'This is what we want it to do.'"

Environmental requirements like these drove the robot design features like size, wheels and terrain-negotiating capabilities.

Other Recon Scout XT design features include a one-hour run time on internal batteries that can be recharged by multiple sources ranging from wall power to a military BB-2590 battery. The robot is turned on and off by the removal or insertion of a single pin, with the operator control unit activated by a switch on the bottom of the housing.

In addition to early lessons learned feedback that helped drive improved communication and water resistance enhancements, requests from other field users have led to optional upgrade features like a "dimmable screen" and a video output port to provide the ability to record mission video on another device.

"We have been listening closely to the users about what they want and improvements that they want," Langdon said, "and are actively pursuing all of those improvements that are possible."

"The feedback has been tremendous from the troops," he added. "We have been told that the dismounted infantry soldier likes our system better than any other robot that has been deployed so far, and it's not necessarily that ours is better than some of the others—it's just that it's so much smaller that soldiers can have it with them all the time. The larger robots—like PackBots, Talons or SUGVs [small unmanned ground vehicles]—are great devices. They certainly do things that ours can't, but they aren't necessarily something that you want to carry around all the time."

Langdon concluded with a small-arms analogy: "Every man doesn't want to carry a .50-caliber machine gun around, but at the same time you certainly don't want to give up the capability that the .50-caliber machine gun gives you. That's the reason you have an M4 carbine and an M249 squad automatic weapon and everything up to and including a .50-caliber machine gun. Different sizes are needed because one size doesn't fit all."

The company plans to complete deliveries on the most recent order by the end of May. ★

Reviews

The Complexities of Eisenhower

Eisenhower in War and Peace. *Jean Edward Smith. Random House. 976 pages; black-and-white photographs; maps; notes; index; $40.*

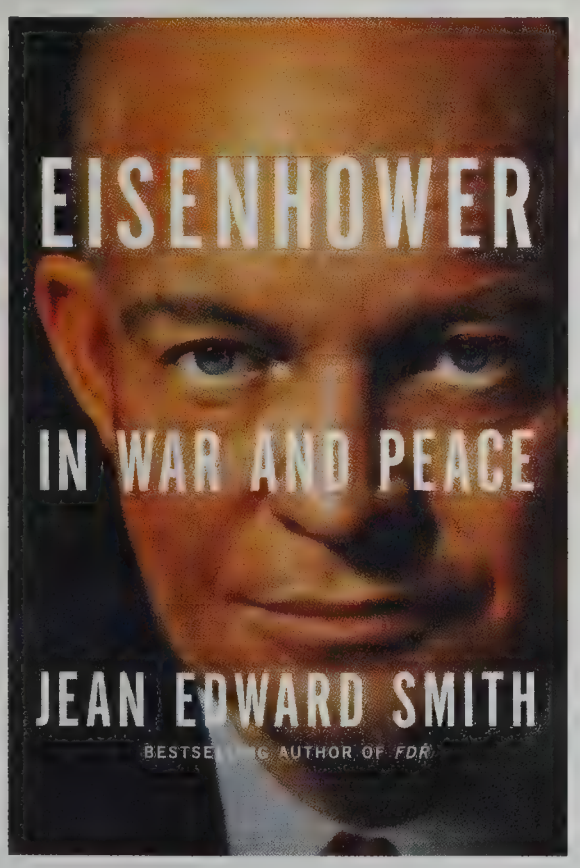
By COL Cole C. Kingseed
U.S. Army retired

In the 50-plus years since he relinquished the Presidency, no chief executive has undergone a more remarkable transformation in public estimation than Dwight D. Eisenhower. In *Eisenhower in War and Peace*, Jean Edward Smith plows familiar ground pioneered by columnist Murray Kempton and Princeton's Fred I. Greenstein, who first challenged the notion that Eisenhower served as a caretaker president who delegated principal decision making to White House chief of staff Sherman Adams and Secretary of State John Foster Dulles.

Beginning with Stephen E. Ambrose's two-volume biography of Eisenhower just prior to the centennial of Eisenhower's birth, a number of prominent historians, including Carlo D'Este (*Eisenhower: A Soldier's Life*), Geoffrey Perret (*Eisenhower*) and Michael Korda (*Ike: An American Hero*), have produced standard biographies of America's 34th President. Whereas each author contributes to our understanding of Eisenhower, Smith opines that some of Ike's biographers—he cites Ambrose in particular—"twisted the facts to fit [their] portrayal of Ike."

Smith offers a sympathetic portrayal of the man who not only commanded the largest coalition army in history, but also guided his country through a turbulent decade in American politics and left the office more popular than any of his successors. As a biographer, Smith has few equals. The author of the highly acclaimed *FDR*, winner of the 2008 Francis Parkman Prize; *Grant*, a 2002 Pulitzer Prize finalist; *John Marshall: Definer of a Nation*; and *Lucius D. Clay: An American Life*, Smith is currently a senior scholar in the history department at Columbia University.

Smith's Eisenhower is far more complex than his earlier biographers noted. The Eisenhower who emerges from these pages is an ambitious military officer whose rise to prominence as supreme commander often "reflected circumstance more than choice."



"Human events," Smith writes, citing Machiavelli, "are half determined by *fortuna*, and from the beginning, fortune smiled on Ike." Far more important was how Eisenhower rose to the occasion once he reached positions of authority. Following World War II, Eisenhower drifted naturally to politics. As President, Ike proved he was "the right man at the right place at the right time."

Smith makes his greatest contribution in challenging the standard interpretations of Eisenhower's life. Contrary to conventional wisdom, Smith credits Third Army commander then-LTG Walter Krueger, not Eisenhower, as the real genius behind Krueger's Blue Army's success in the Texas-Louisiana maneuvers of 1941. Nor was Eisenhower runner-up to GEN George C. Marshall to command Operation Overlord—the Allied invasion of Europe—opines Smith. According to Smith, President Roosevelt took the measure of both men and "concluded [Eisenhower] was best suited to lead a multinational force across the Channel." Smith also posits that Eisenhower "didn't crack the Solid South with his elections in 1952 and 1956, but he laid the groundwork for a subsequent Republican Party renaissance."

With regard to civil rights, Smith finds no evidence that Ike claimed his greatest mistake as President was appointing Earl Warren as chief justice of the United States. To the contrary, Smith sees abundant evidence that Eisenhower did not. Smith also contends that Eisenhower's decision to send in federal troops to Little Rock, Ark., in 1957 to enforce the district court's order to desegregate Central High School was "the hardest decision [Ike] had had to make since D-Day." Those who criticize Eisenhower for not moving fast enough on civil rights should remember "that it was his judicial nominees who made the revolution possible."

To his credit, Smith addresses the less attractive aspects of Ike's career and is very willing to offer his interpretations as to their validity, though Smith confines many of his personal opinions to the explanatory footnotes. He accepts at face value that Eisenhower enjoyed a wartime relationship with Kay Summersby. When the war ended and Ike returned to the United States, "ambition conquered affection" and Eisenhower closed the book on his relationship with Summersby. Did Eisenhower write a letter to Army chief Marshall expressing his desire to divorce Mamie and to marry Summersby? The tangible evidence says no, but Smith remains convinced of the validity of "the Marshall letter."

Smith also assesses the political split that occurred between President Harry Truman and Eisenhower on Ike's assumption of the Presidency and states

Under the [illegible] Sheikh [illegible] Al Nahyan
President of the UAE's Supreme Command [illegible] Armed Forces

17-21 February 2013
ADNEC, Abu Dhabi, United Arab Emirates

IDEX ايدكس 2013

DEFENCE TECHNOLOGY FOR THE FUTURE.

The Middle East and North Africa's largest defence and security exhibition returns to Abu Dhabi in February 2013. Where the global defence industry will meet influential VIP's, decision makers, military personnel and key investors at IDEX 2013.

To book an exhibition stand or outside space email info@idexuae.ae

For detailed information about IDEX 2013 visit www.idexuae.ae

Headline Sponsor: TAWAZUN توازن

Organised by: ADNEC

In association with: UAE Armed Forces

Co-located with: NAVDEX NAVAL DEFENCE EXHIBITION 2013

that it was Eisenhower, not Truman, who engineered the break. Smith believes strongly that much of "the bitterness that developed during the 1952 campaign between Eisenhower and President Truman was attributable less to political partisanship than to Ike's knowledge that he was hostage to the possible release of GEN Marshall's letter."

Despite the merits of *Eisenhower in War and Peace*, there are some minor shortcomings. Smith dedicates a large portion of the biography to Ike's development as a leader in the antebellum Army of the interwar period, but reserves scarcely six pages to Eisenhower's tenure as Army chief of staff. Not surprisingly, given his current role on the faculty at Columbia University, Smith provides a far more lengthy examination of Ike's tenure as President of Columbia. Smith also glosses over Eisenhower's failure to condemn Senator Joseph McCarthy for the senator's attack on GEN Marshall during the 1952 presidential campaign—something for which historian Ambrose took Eisenhower to task and cited as one of Ike's chief failures. A few inaccuracies also sprinkle the text.

These observations aside, Smith has produced a tour de force in this biography of the nation's 34th President. Massive in scope and prodigious in its research, *Eisenhower in War and Peace* reintroduces us to one of the most remarkable leaders of the 20th century. Given the fact that Eisenhower gave the country eight years of relative peace and prosperity, it is hardly a surprise that a half century after Eisenhower relinquished the Presidency, Americans still like Ike. After reading *Eisenhower in War and Peace*, it is easy to understand why.

__COL Cole C. Kingseed__, USA Ret., Ph.D., a former professor of history at the U.S. Military Academy, is a writer and consultant.

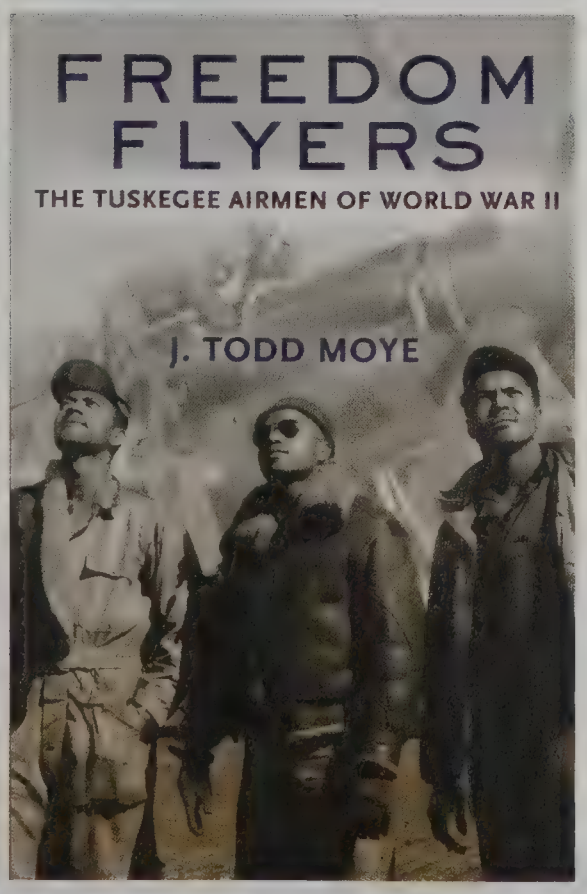
'The Experiment' Reconsidered

Freedom Flyers: The Tuskegee Airmen of World War II. *J. Todd Moye. Oxford University Press. 241 pages; index; black-and-white photographs; $17.95.*

By LTG Julius W. Becton Jr.
U.S. Army retired

Freedom Flyers: The Tuskegee Airmen of WWII is more than the story of the 332nd Fighter Group. It is also the story of the black American from the degradation of Jim Crow and deep segregation up to the promotion of Daniel (Chappie) James Jr. to his fourth star and assumption of command of the North American Aerospace Defense Command.

J. Todd Moye, a history professor at the University of North Texas, directed the National Park Service's five-year Tuskegee Airmen Oral History Project. He draws on those interviews to inject a first person, insider feel into his exhaustive study of the Tuskegee program. As such, he did a superb job in presenting the history of the first African-American military pilots, but he also exceeded all expectations I've ever held for literature describing the plight of the black man in the U.S. Army before, during and post-World War II.



I found his story to be quite gripping. In the spirit of full disclosure, I knew many of the individuals, among them Charles A. (Chief) Anderson, Gen. Daniel (Chappie) James Jr., Gen. Henry H. (Hap) Arnold, Maj. Gen. Lucius Theus, Lt. Col. Lee Archer Jr., Roscoe Draper and Cpt. Percy E. Sutton.

Moye fills the reader in on the importance of the National Association for the Advancement of Colored People (NAACP) to the war effort and First Lady Eleanor Roosevelt's role in instigating "the Experiment" over the objections of many senior War Department folks. The Experiment refers to lifting the restriction that prevented African American servicemen from learning to fly. Supporters of this experiment, such as W.E.B. Du Bois, the *Pittsburgh Courier* and the *Chicago Defender*, were able to overcome this restriction, which stemmed from the devastating conclusion of the 1925 Army War College study. "The Use of Negro Manpower in War" stated in parts: "The Negro, particularly the officer, failed in the World War; black troops had proven in the course of the war that their unique biological destiny suited them for service in labor battalions but not combat units. Under no circumstances, they recommended, should the War Department throw good money after bad in an effort to mold them into capable officers."

Throughout this excellent history is a common thread of the historically black colleges and universities, the black press, the impact of politicians' concern about the Negro vote, and the NAACP's national legal committee, precursor to its Legal Defense & Education Fund, led by Thurgood Marshall. Moye goes on to say, "The Tuskegee Airmen were among the first Americans to imagine the kind of racially integrated society that most Americans now take for granted. They worked and sacrificed and proved that such a society could exist and thrive."

He notes that "not all black Americans at the time appreciated the Tuskegee program; many considered it an embarrassing symbol of Jim Crow inequality. But blacks did show a remark-

able unanimity in forcing the fight for equality and democracy within the borders of the United States to the forefront of American war aims." He acknowledges that in fighting the war on two fronts, "the Tuskegee Airmen did not defeat white supremacy in the United States once and for all. They did not by themselves end racial segregation in the armed forces. It would take the renewed commitment of thousands of individuals and the creation of new institutions to accomplish these goals in the decades following World War II."

Following the initial deployment of the 99th Pursuit Squadron, first to North Africa and then Italy, the military leadership in Washington remained quite skeptical about the experiment. A squadron commander's testimony before the War Department's Advisory Committee on Negro Troop Policies (better known as the McCloy Committee, after its chairman, Assistant Secretary of War John J. McCloy) concluded that the experiment should be terminated. Such testimony caused the black press to refocus its attention on the War Department's use of the 99th and "galvanized black public opinion behind the squadron." The Army Chief of Staff, GEN George Marshall, directed a study of the squadron's effectiveness, which concluded that "'there was no significant general difference' between the 99th's performance and that of other fighter squadrons in the Mediterranean Theater of Operations."

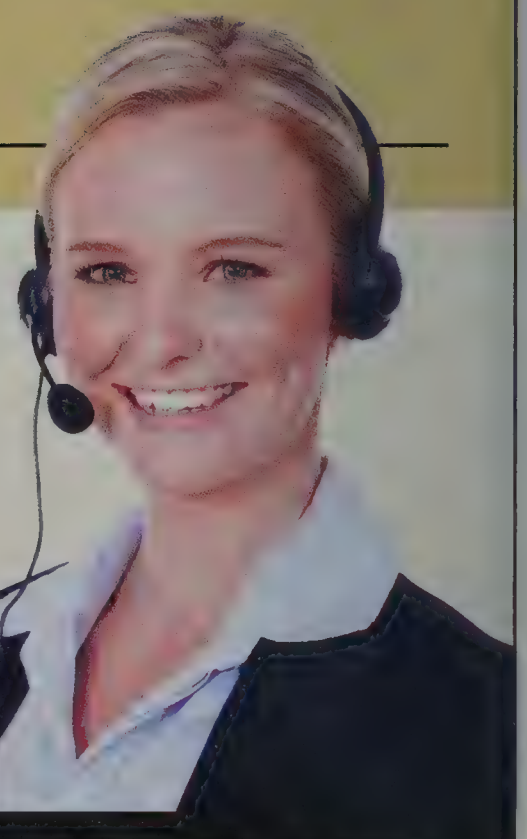
The squadron was attached to another group, integrated into the work of the 79th Group and treated as equals. On a larger scale, given an opportunity to do something more than menial Army chores, the pilots of the 99th became examples of what blacks in the other services could accomplish if afforded a fair chance.

Following this change, NAACP Executive Director Walter White, who had previously toured the European Theater of Operations as a war correspondent for the *New York Post*, returned to Europe and made the following observation: "The most remarkable development was the total obliteration of consciousness of difference in skin color among both white and Negro flyers of the 79th Group." He documented an incident in which white flyers of the 79th disobeyed an order from the theater commander and held a desegregated dinner party with dancing to celebrate the anniversary of the group's entrance to combat. "We have fought together for a year, some of our members have died together, and when we celebrate we are going to do it together no matter what the top brass says." White offered a theory explaining why race relations were so much better at the front lines of the war: "I became convinced in Italy of the soundness of the formula which has almost mathematical exactitude … that race prejudice flourishes in inverse ratio to proximity to actual fighting. The pettiness of race and creedal differences are sloughed off when men face sudden death."

Moye's discussion of the creation of the all-black 477th Medium Bombardment Group was rather painful for this reviewer. It brought back memories of

ANNOUNCING

AUSA's Member Support Call Center



Our new call center is up and running.

The call center will answer AUSA membership related questions and concerns.

855-246-6269 DIRECT DIAL

ASSOCIATION OF THE UNITED STATES ARMY

ASSOCIATION OF THE US ARMY | 2425 Wilson Blvd. | Arlington, VA 22201

being a black man in our Army, someone who had volunteered because GEN Hap Arnold had visited our high school. (I use the term *our* because both Henry H. Arnold and Julius W. Becton graduated from Lower Merion High School in suburban Philadelphia.) Six of us enlisted in the Army Air Corps enlisted reserves following his visit. Upon graduation in the summer of 1944, I was sent to Mississippi and my five classmates to Florida.

The treatment at Keesler Field, Biloxi, Miss., where I was eliminated from the pre-flight program for 20:25 vision and assigned to an aviation engineer battalion at MacDill Field, Tampa, Fla., was depicted in the book. I could have been trained as a bombardier or navigator as Moye describes in detail.

The treatment of German and Italian prisoners of war was such that they came before the black airmen and soldiers. Moye's details of black commissioned airmen at Godman Field, Ky., are almost exactly as described to me by my best man, LT James R. Williams. Following successful completion of Infantry Officer Candidate School at Fort Benning, Ga., where I enjoyed a completely integrated training program as long as I remained in the training area (unlike my friends at Tuskegee), I re-

turned to the realities of soldiering in a segregated army by joining the black 93rd Infantry Division on the island of Morotai after V-J Day.

Throughout *Freedom Flyers* Moye weaves the story of BG Noel F. Parrish, whom Moye describes as a Southern white liberal, the son of a Disciple of Christ minister. As a teenager Parrish worked to pass resolutions opposing war and racial segregation in his father's church. He entered Rice Institute in Houston, Texas, at the age of 14 and graduated in 1928. Unable to find a job, he returned to Rice to become a teacher. When school administrators refused to hire a man not much older than the students, Parrish ended up joining the Army. His fear of horses led him to ask for a transfer from the 11th U.S. Cavalry to the Army Air Corps, and he graduated from basic aviation training at Randolph Field, Texas, earning his second lieutenant's commission in 1932. Shortly afterwards, Parrish lost his commission due to a reduction in force, but he reenlisted and flew transport planes as a private first class. With his subsequent recall to active duty as a reserve officer, Parrish lived up to the values inculcated in his childhood and substantiates my inclination to add a second subtitle to MOYE's work: *The Tuskegee Airmen of World War II—And How Noel Parrish Made It Happen.*

"When the black aviation cadets be-

ARCIC/AUSA
WRITING CONTEST

The Army Capabilities Integration Center (ARCIC) is seeking to identify, discuss and influence the outcome of significant defense issues that affect the U.S. Army. To allow for more direct participation in the public debate of defense-related issues, ARCIC and AUSA are once again co-sponsoring a writing contest. The submission of quality manuscripts is encouraged.

Contest participants may choose from three themes:

- The Network as a Weapon and Mission Command;
- Asia-Pacific and the Middle East; and
- Special Operations Forces and General Purpose Forces Integration.

Papers must be original, unpublished and between 5,000 and 10,000 words, with a one-page synopsis and a brief biography of the author. The deadline for submission is 31 May 2012. A cash prize* of $1,000 will be paid to the winner, and all papers will be submitted to AUSA's Institute of Land Warfare for possible publication.

Paper Submissions

on disk only to:
ARCIC Initiatives Group
ATTN: D. Shunk
Room 4105B, Building 950
950 Jefferson Ave
Fort Eustis, VA 23604

or e-mailed to:
david.shunk@us.army.mil

For more information, visit www.arcic.army.mil

* *Essays submitted by individuals employed by/assigned to ARCIC and by individuals employed by AUSA national headquarters may be considered for publication by AUSA, but those individuals will not be eligible to receive the cash prize.*

The United States Army neither states nor implies any endorsement of AUSA, the Institute of Land Warfare or any other nonfederal entity participating in this event.

gan training in July 1941," Moye writes, "the entire U.S. military had exactly two black officers other than chaplains on active duty, BG Benjamin O. Davis Sr.," and his son, then-Cpt. B. O. Davis Jr., a 1936 graduate of West Point and the future commander of the 99th squadron. The announcement of its creation was clearly a political move along with the promotion to the rank of general officer. Parrish's unique people skills were thoroughly challenged in assisting CPT Davis to become a successful pilot.

One final note: B. O. Davis Sr. became a brigadier general in 1941. Thirty-one years later, in 1972, I became the sixth black American general officer in the Army.

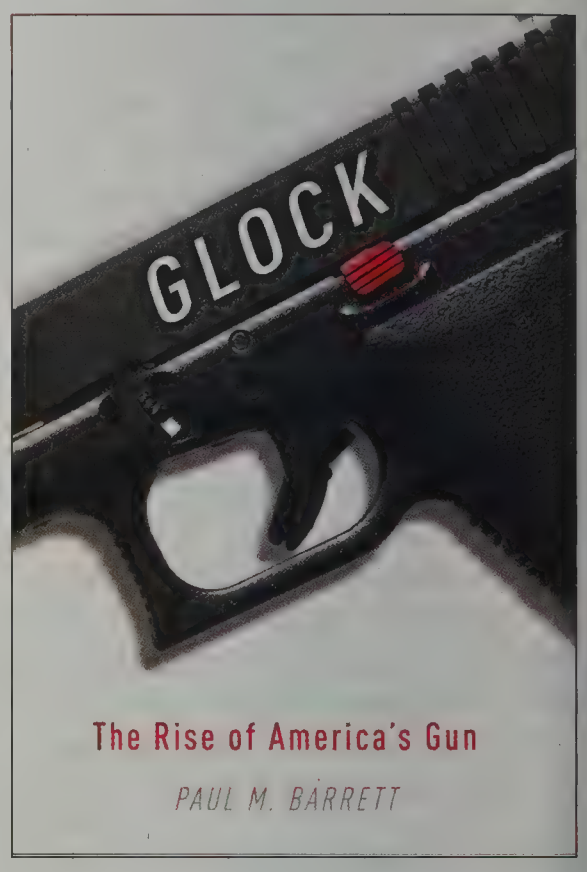
__LTG Julius W. Becton Jr.__, USA Ret., served nearly 40 years in the U.S. Army. In addition to serving in World War II, the Korean War and the Vietnam War, LTG Becton commanded the VII Corps in Europe during the Cold War. In 2007 he was awarded AUSA's highest honor, the George Catlett Marshall Medal.

Varied Fare

Glock: The Rise of America's Gun. *Paul M. Barrett. Random House. 304 pages; index; $26.*

Although it was fielded primarily to special operations elements within the U.S. armed services, few military personnel have not had some level of contact or discussions regarding the pistol models created by Gaston Glock, an Austrian car-radiator factory operator who had previously turned a side business of making door hinges and curtain hardware into a contract to manufacture field knives and bayonets for the Austrian Army.

Glock's lack of weapons background when learning of an upcoming Austrian military competition for a new pistol in the early 1980s allowed him to approach the requirement with a fresh perspective. The resulting Glock 17—actually named for his 17th invention while coincidentally carrying a 17-round magazine—won the Austrian competition with a resulting 1983 order for the first 20,000 weapons.



Although Glock declined to compete in the 1984 trials to select a new sidearm for U.S. soldiers—trials that resulted in the U.S. Army's selection of the Beretta M9—the innovative design features surrounding Glock's "plastic gun" helped to change the face of the semiautomatic handgun market in both law enforcement and civilian applications.

Author Paul Barrett presents the Glock story in a well-researched, fast-moving style that brings together the people, the technologies, the business decisions, the political gun-control debates, and related societal issues ranging from movie placements to the flexibility of rhyming Glock in a plethora of hip-hop and rap music lyrics.

While U.S. military applications were originally focused on specialized units with their own acquisition authority, recent U.S. decisions to field more than 200,000 of the pistols to Afghan and Iraqi police and military forces over several years increase the significance of this excellent book for a specialized military audience.

—Scott R. Gourley

Online Registration Starts –1 JUNE

- Go to **www.ausa.org** and click on the small Annual Meeting image or the Annual Meeting link
- Fill out the registration form and click "Submit"
- Print your confirmation with your personalized bar code
- Bring this with your government-issued photo ID to the Registration Desk to pick up your badge

See you there!

22-24 OCTOBER 2012 • WASHINGTON, D.C.

ASSOCIATION OF THE UNITED STATES ARMY
2425 Wilson Boulevard • Arlington, VA 22201
(703) 841-4300 • (800) 336-4570 • www.ausa.org

2012 AUSA
ANNUAL MEETING AND EXPOSITION
A Professional Development Forum

22-24 OCTOBER 2012 • WALTER E. WASHINGTON CONVENTION CENTER • WASHINGTON, D.C.

2012 ADVANCE TICKET ORDER FORM

Advance ticket orders available to members only

ORDERS MUST BE RECEIVED BY 28 SEPTEMBER 2012

Advance ticket purchases with badges will be held for pickup at the Ticket Pickup Counter of the Walter E. Washington Convention Center.
A government-issued photo identification will be required for pickup.

SPECIAL NOTE: SEPARATE TICKETS ARE REQUIRED FOR EACH FUNCTION.
BADGES AS WELL AS TICKETS ARE REQUIRED FOR ADMISSION TO ALL FUNCTIONS.

Function	Quantity	Price	Amount
Guard/Reserve Breakfast (22 Oct.)	_____	$40.00	_____
President's Reception (22 Oct.)	_____	$50.00	_____
Eisenhower Luncheon (23 Oct.)	_____	$60.00	_____
Army Civilians' Luncheon (24 Oct.)	_____	$50.00	_____
Marshall Memorial Reception (24 Oct.)	_____	$45.00	_____
Marshall Memorial Dinner (24 Oct.)	_____	$95.00	_____

Total Amount $_____

Payment must accompany this order • Please print or type
No refunds for ticket orders cancelled after **28 SEPTEMBER 2012**
Cancellation in writing only

Americans with Disabilities Act (ADA): Check here ❑ if you need special arrangements.

AUSA MEMBERSHIP NUMBER

RANK	FIRST NAME	INITIAL	LAST NAME		PHONE NO.
UNIT, CHAPTER, OR TITLE/COMPANY, ETC.					
ADDRESS (REQUIRED)			STATE	ZIP	COUNTRY
FAX			E-MAIL		
GUEST NAME – PLEASE ATTACH SEPARATE SHEET FOR ADDITIONAL GUESTS					

PAYMENT BY: ❑ CHECK ❑ VISA ❑ MASTERCARD ❑ AMEX

CARD EXPIRES MO. YR.

SIGNATURE _____

www.ausa.org

MAIL TO: Association of the United States Army
P.O. BOX 101560
Arlington, VA 22210-0860

FAX TO: 703-243-2589

Over 650 of the world's leading defense companies are members of the AUSA Sustaining Membership Program. Is yours?

The Association of the United States Army's (AUSA) Sustaining Membership Program is your vital link to Army decision-makers at the highest levels. As the Army's professional organization, AUSA has played a role in strengthening national security for over 60 years by facilitating partnerships between military decision-makers and industry leaders.

When you join AUSA's Sustaining Membership Program, your company's executives will have the opportunity to share ideas with top Army officials at AUSA events. These events are conducted and attended by high level Army decision-makers, DoD officials and industry leaders – the individuals who are setting the agenda for the Army's future!

Join us today and discover what the AUSA Sustaining Membership Program can do for your business.

AUSA Sustaining Membership Program:
Supporting the Army–Industry Partnership

Association of the United States Army
2425 Wilson Boulevard • Arlington, VA 22201 • (703) 841-4300 ext. 2665 • www.ausa.org

Historically Speaking

Our Honored Dead, Overseas

By BG John S. Brown
U.S. Army retired

Memorial Day will find many of us at cemeteries and monuments, honoring fellow Americans who died for their country. In an earlier article we spoke about the evolution of Memorial Day and of our robust network of national cemeteries, most of which are now administered by the Department of Veterans Affairs. Across the entire United States, they attract millions of visitors a year and provide final resting places within a few hours' drive of almost anyone who resides in our country. Our commitment to honor fallen soldiers, sailors, airmen and marines does not stop at the water's edge, however. There have been more than 140 million man-years of military service since World War II, perhaps a third overseas.

During the 18th and much of the 19th centuries, all but a few of the Americans who died for our country or its Colonial predecessor did so within the boundaries of what is now the United States. Our first truly distant, major military expedition—too distant to adequately recover bodies with the technology of the time—was to Mexico City in 1847. In 1851, Congress arranged to have the remains of 750 American soldiers from numerous burial sites on different battlefields brought together in what has become the Mexico City National Cemetery. Here, about a mile from our Embassy, a beautifully landscaped garden surrounds their monument. Over the years, about 800 of their countrymen, mostly diplomatic and military personnel and their families, have joined them.

Following the paroxysm of the American Civil War and a generation committed to opening the American West, American servicemen again deployed overseas in large numbers. Expeditions took them to Hawaii and the Philippines. The Santiago Surrender Tree in Cuba honors the sacrifices of Americans and Cubans alike in achieving Cuba's independence from Spain. An alliance with Panama brought with it the mammoth task of building, and then maintaining, the Panama Canal through an isthmus then teeming with tropical diseases. The Corozal American Cemetery and Memorial honors almost 5,500 American servicemembers, civilians and dependents who died in Panama.

As grand as the late 19th-century leap overseas was, it was dwarfed by the demands of World War I. Russia was destroyed, and Great Britain and France were on the brink of destruction. Almost 5 million Americans mobilized, of whom more than 2 million served overseas. Almost 117,000 died, of whom 30,921 are buried overseas in American cemeteries and 4,452 are honored on Tablets of the Missing. Their sacrifice turned the tide. Grateful allies ceded us land for burial of our dead, and in 1923 a grateful Congress established the American Battle Monuments Commission to commemorate the service, achievements and sacrifices of American armed forces.

The first order of business for the commission was an unprecedented effort to build cemeteries and monuments worthy of those who had served. The first chairman, GEN John J. Pershing, vowed, "Time will not dim the glory of their deeds." To that purpose he inspired cemeteries now famous

Am. Battle Monuments Comm.

Am. Battle Monuments Comm.

Above, 5,301 American veterans and others who contributed to the construction, operation and security of the Panama Canal are buried at the Corozal cemetery, north of Panama City. Left, more than 1,500 Americans are buried in this cemetery outside Mexico City.

MEMORIAL DAY

The muffled drum's sad roll has beat
The soldier's last tattoo;
No more on Life's parade shall meet
That brave and fallen few.
On Fame's eternal camping ground
Their silent tents are spread,
And Glory guards, with solemn round,
The bivouac of the dead.

—from "Bivouac of the Dead"
by Theodore O'Hara (1820–1867)

DoD/MC1 Chad J. McNeeley

PELICAN™

SPECIALIZED PROTECTION

WHEN FAILURE IS NOT AN OPTION

Today's war fighter depends on an array of sophisticated equipment to accomplish the mission. Sensitive electronics, weapons, optics and communications equipment provide the modern military the ability to prevail against any enemy. By insuring the operability of such mission critical gear, Pelican Cases are a vital component of tactical planning.

From advanced portable lighting systems to high performance protective case solutions, Pelican brings you superior designs so you can focus on the mission.

Reliability in all environments and operational conditions is the trademark of Pelican Products.

> TACTICAL LIGHTS

- LED TECHNOLOGY
- WEAPON MOUNTS

> PROTECTOR CASES

- WATERTIGHT , DUSTPROOF, CRUSHPROOF PROTECTION
- OVER 500+ SIZES

> AREA LIGHTING AND NIGHT VISION TOOLS

- 8 UNIQUE MODELS FROM 900 TO 8000 LUMENS
- NIGHT VISION AND IR TOOLS FOR STEALTH OPERATIONS

PELICAN™

www.pelican.com/am

Pelican Products, Inc. 23215 Early Avenue, Torrance, CA 90505
866.291.8029 (TOLL FREE) Tel 310.326.4700 • Fax 310.326.3311

All trademarks are registered and/or unregistered trademarks of Pelican Products, Inc., its subsidiaries and/or affiliates.

FIREPOWER.

NEXT-GENERATION SMALL ARMS INCREASE MOBILITY AND LETHALITY.

AAI's Lightweight Small Arms Technologies industry team has cut in half the weight of next-generation small arms systems — lighter than today's legacy systems, yet more effective.

For dismounted warfighters, less weight means greater mobility and survivability.

The 50 percent reduction in weight, plus a 40 percent reduction in ammunition volume, translate into more rounds carried by infantry and logistics support units — resulting in greater battlefield lethality.

Test firings of our prototype 5.56mm Light Machine Gun and lightweight ammunition are already validating concepts and weight reduction, as well as demonstrating performance.

To learn more, e-mail RSC_AAIReg@aai.textron.com or call 1-800-655-2616.

aaicorp.com

© 2012 AAI Corporation. All rights reserved. Textron Systems Advanced Systems is an operating unit of Textron Systems, a Textron Inc. (NYSE: TXT) company. AAI and design is a registered trademark of AAI Corporation. aaiam0512

AAI

The Magazine of the Association of the United States Army

ARMY

Education Periodicals
[non-circulating]
355.05 UNC
v. 62, no. 6 (2012)
A

Jun ausa.org $3.00

HAPPY BIRTHDAY, ARMY

**********AUTO**ALL FOR ADC 604
11639 20130531 20120601
ACQUISITIONS DEPT.C0333593 0001
ACQUISITIONS DEPT.C0333593 001834
1408 W GREGORY DR P000008
URBANA IL 61801-3607 01:026565

LIGHT ON WEIGHT.
HEAVY ON PROTECTION.

The Lockheed Martin Joint Light Tactical Vehicle is production-ready and blast-proven. Our vehicles have been through a rigorous boot camp of mountainous and desert terrain. They've driven over 160,000 combined miles. And while JLTV is heavy on force protection, Army and Marine helicopter lift tests also show it is light and transportable. Its dual performance for both the Army and the Marines makes it the most affordable choice for any mission. Equipped with Lockheed Martin's systems integration experience and BAE Systems' innovative protection, we're making sure JLTV is secure, reliable and ready to go.

THE LOCKHEED MARTIN TEAM

LOCKHEED MARTIN BAE SYSTEMS

JLTV

www.lockheedmartin.com/jltv

ARMY MAGAZINE

JUNE 2012
VOL. 62, NO. 6

PUBLISHED BY THE ASSOCIATION OF THE U.S. ARMY

www.ausa.org

FRONT & CENTER

Happy Birthday, Army
By GEN Frederick J. Kroesen, USA Ret.
Page 21

Education, Experience and Training: Responsibilities to The Army as a Profession
By LTG James M. Dubik, USA Ret.
Page 22

Mission Command: Do We Have The Stomach for What Is Really Required?
By COL Tom Guthrie
Page 26

Another Army Birthday
By BG Harold W. Nelson, USA Ret.
Page 28

FEATURES

Mission Command: Reflections from the Combined Arms Center Commander
By LTG David G. Perkins
A decade of experience in Iraq and Afghanistan has contributed to the evolution of mission command, promoting disciplined initiative and empowering leaders to adjust operations within their commander's intent. **Page 30**

Cross-Functional Team Staff Structure in the Afghanistan Counterinsurgency
By BG Wayne W. Grigsby Jr., LTC Mark E. Johnson, LTC Ed Ledford, LTC John Callery, LTC Paul P. Smith Jr., COL Michael Rothstein and MAJ Gail Fisher
With functional experts of varied expertise and rank working collaboratively and simultaneously, cross-functional teams bring critical attributes of mission command to the task of developing actionable plans in hours or minutes. **Page 35**

Special Operations/Conventional Forces Interdependence: A Critical Role in 'Prevent, Shape, Win'
By MG Bennet S. Sacolick and BG Wayne W. Grigsby Jr.
To guide institutional change required over the past 10 years, the Army must integrate the cultures and capabilities of special operations forces and conventional forces. **Page 39**

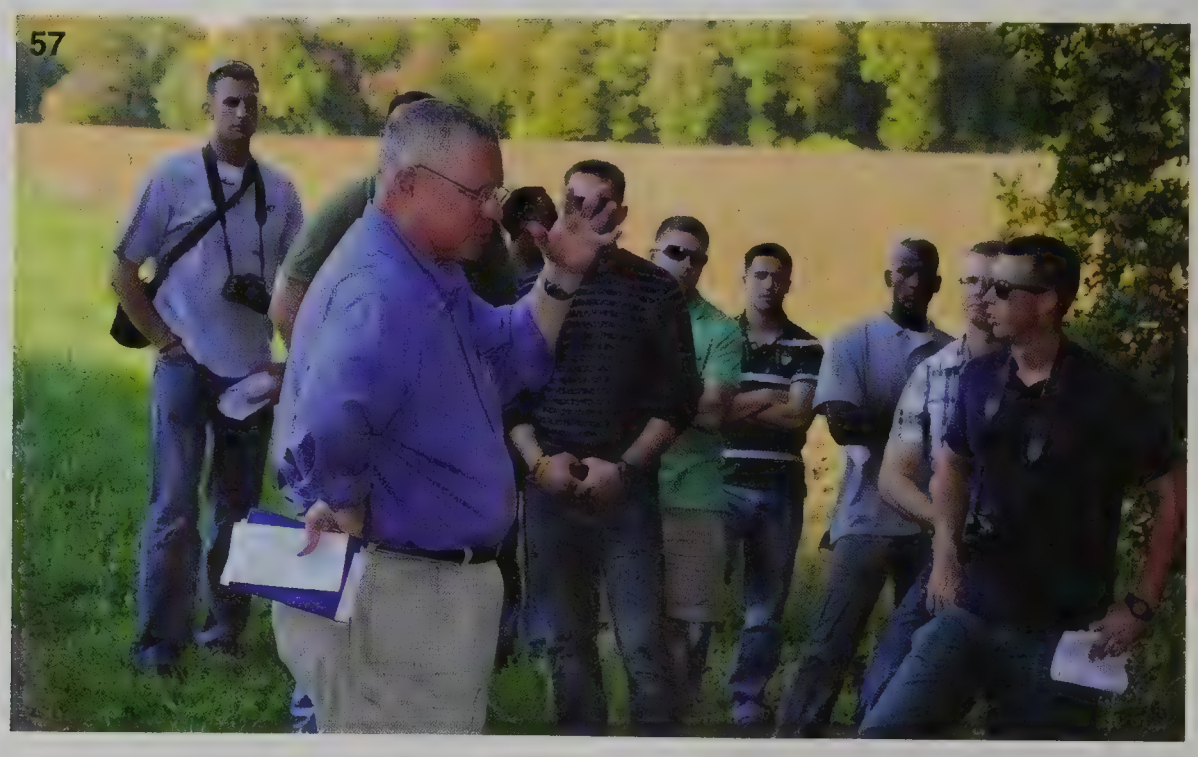
CEMA: A Key to Success in Unified Land Operations
By BG Wayne W. Grigsby Jr., COL J. Garrett Howard, Tony McNeill and LTC Gregg Buehler, USA Ret.
By codifying cyber-electric activities (CEMA) within its doctrine, the Army is integrating and managing electronic warfare, cyberspace and electromagnetic spectrum activities within unified land operations. **Page 43**

Toxic Leadership: What Are We Talking About?
By LTG Walter F. Ulmer Jr., USA Ret.
'Toxic leaders corrupt healthy climates,' states the author. Their presence in the Army, though in the minority, must be recognized, individuals must be identified and action that doesn't compromise command authority must be implemented.
Page 47

ARMY CONTENTS

53

An Open Letter to My West Point Roommate, MG Neal Creighton, USA Retired
By MG Guy S. Meloy, USA Ret.
The commander of a combat battalion reveals what really happened on the day of the so-called 'pot party' in 1970. ***Page 53***



57

The Relevancy of a Staff Ride to the Modern Field Artillery Battalion
By CPT Vinh Q. Bui and 1LT Thaddeus C. Fox
A staff ride to the battlefield at Verdun, France, one of the best-preserved World War I battlefields, affords firsthand insights into the history and development of the field artillery branch. ***Page 57***

61

Company Command—Building Combat-Ready Teams: Third-Generation Leadership—Redux
Experienced company commanders trace the evolution of their leadership style to their first troop commander. ***Page 61***

DEPARTMENTS

Letters 4
Advertisers in This Issue 6
Washington Report 8
News Call 11
Sustaining Member Profile 66
Soldier Armed 68

Reviews 71
Historically Speaking 77

MORE DATA.
LESS DOUBT.

Situational awareness is critical. DRS provides a number of EO/IR, communications and computing solutions that turn virtually any asset into a data collection point — from warfighters and ground vehicles to aircraft and fixed positions. Because in the field, better data means better results.

Reducing Doubt On The Battlefield. That's Go To

DRS.com/data

DRS
TECHNOLOGIES
A Finmeccanica Company

GEN Gordon R. Sullivan, USA Ret.
President, AUSA
LTG Theodore G. Stroup Jr., USA Ret.
Vice President, Education, AUSA

Mary Blake French — *Editor in Chief*
Paul W. Bartels — *Art Director*
Larry Moffi — *Managing Editor*
Dennis Steele — *Senior Staff Writer*
Toni Eugene — *Associate Editor*
Joseph L. Broderick — *Production Artist*
Jeremy Dow — *Assistant Editor*
Katharine Scott — *Assistant Editor*
Jocelyn Wascher — *Editorial Assistant*

Contributing Editors
GEN Frederick J. Kroesen, USA Ret.; LTG James M. Dubik, USA Ret.; and Scott R. Gourley

LTG Thomas G. Rhame, USA Ret.
Vice President, Finance and Administration, AUSA

James E. Burke — *Advertising Manager*
Meagan B. Bailey
Advertising Production Manager

Norman Campbell — *Fulfillment Director*
Valerie Holman — *Fulfillment Manager*

ARMY is a professional journal devoted to the advancement of the military arts and sciences and representing the interests of the U.S. Army. Copyright©2012, by the Association of the United States Army. ☐ **ARTICLES** appearing in ARMY do not necessarily reflect the opinion of the officers or members of the Council of Trustees of AUSA, or its editors. Articles are expressions of personal opinion and should not be interpreted as reflecting the official opinion of the Department of Defense nor of any branch, command, installation or agency of the Department of Defense. The magazine assumes no responsibility for any unsolicited material. ☐ **ADVERTISING.** Neither ARMY, nor its publisher, the Association of the United States Army, makes any representations, warranties or endorsements as to the truth and accuracy of the advertisements appearing herein, and no such representations, warranties or endorsements should be implied or inferred from the appearance of the advertisements in the publication. The advertisers are solely responsible for the contents of such advertisements. ☐ **RATES.** Individual memberships and subscriptions payable in advance (one year/three year): $21/$63 for E1-E4, cadets/OCS and GS1-GS4; $26/$71 for E5-E7, GS5-GS6; $31/$85 for E8-E9, O1-O3, W1-W3, GS7-GS11 and veterans; $34/$93 for O4-O6, W4-W5, GS12-GS15 and civilians; $39/$107 for O7-O10, SES and ES; life membership, graduated rates to $525 based on age; $17 a year of all dues is allocated for a subscription to ARMY Magazine; single copies, $3.00. Additional postage to all foreign countries, $15 per year. For other rates, write Fulfillment Manager, Box 101560, Arlington, VA 22210-0860.

ADVERTISING. Information and rates available from the Advertising Production Manager or our advertising representatives, who are:

The Audit Bureau

James E. Burke and **Irene Lamar**, 230 Park Ave., Suite 1546, New York, NY 10169. (212) 697-2844. FAX (212) 682-1421. Email: advdpt@aol.com.

ARMY (ISSN 0004-2455), published monthly. Vol. 62, No. 6. Subscription $34 a year. Publication offices: Association of the United States Army, 2425 Wilson Blvd., Arlington, VA 22201-3326, (703) 841-4300, FAX: (703) 841-3505, email: armymag@ausa.org. Visit AUSA's web page on the Internet at www.ausa.org. Periodicals postage paid at Arlington, Va., and at additional mailing office.
POSTMASTER: Send address changes to ARMY Magazine, Box 101560, Arlington, VA 22210-0860.

Letters

Critical Thinking

■ GEN Odierno's challenge to improve critical thinking in the Army by encouraging soldiers to read, especially the books in the Chief of Staff's Professional Reading List (March), is sound advice. He notes, "There is simply no better way to prepare for the future than a disciplined, focused commitment to a personal course of reading, study, thought and reflection."

This reminds me of an anecdote from the mid-1970s at Fort Leavenworth, Kan., when I was the escort officer for GEN Maxwell Taylor, U.S. Army retired. When he was briefed on recent changes to the curriculum, GEN Taylor became increasingly agitated as the commandant described adding more tactics and dropping other more theoretical subjects. Finally, Taylor interrupted: Weren't these changes heading in the wrong direction? The commandant explained that many new weapons were being introduced, so students needed practical instruction in how they should be employed. GEN Taylor, who had in his own career experienced the Army's evolution from horses to nuclear weapons, believed the role of the Command and General Staff College was to prepare officers to serve at higher echelons, not just train battalion commanders. Thus his response to the commandant: "My God, they can read, can't they?"

Reading, however, has not been a strong suit for many of us in the Army. I remember being very sympathetic to Taylor's concerns. As an instructor in the Department of Strategy (which was on the short end of this trend—being downsized and eliminated shortly thereafter) I, too, disagreed with the changes. Yet I also understand the constant competition to fit newer, more relevant courses into the time-constrained curriculum. This presents tough choices.

In making decisions on what to add or subtract from curricula and our personal reading lists, we need to be careful of implicit assumptions that seemed to be prevalent at Fort Leavenworth at the time, that strategic thinking—or critical thinking in GEN Odierno's terms—is something for later, something taught at the War College and the purview of general officers. Another assumption is that it comes naturally, without practice. Those are bad assumptions.

Critical thinking is a habit best cultivated early through reading. It is not an occasional activity that we take up later in life, and the need today is greater than ever. If we don't read more broadly and stimulate critical thinking several levels above our pay grades, as GEN Taylor argued, we will continue to be much better at winning battles than we are at winning wars.

LTC Dick Nelson, USA Ret.
Arlington, Va.

'My Longest Day'

■ Thank you for publishing LTC William P. Baxter's article, "My Longest Day," in the April issue of ARMY. Without a doubt, this is a very well-written account of a powerful and moving episode in the early part of the Vietnam War.

This Month's Cover

A member of the U.S. Army Old Guard Fife and Drum Corps in performance serves as a fitting image for celebration of the Army's 237th birthday.
(Photograph by U.S. Air Force TSgt. Jacob N. Bailey)

I have sent it to many who were there and am sure it will be forwarded to many more.

LTC Dave Sikes, USA Ret.
1st Log. Cmd., 1969–1970
1st Cav. Div., 1970
Mount Pleasant, S.C.

■ Since receiving the April issue of ARMY I have reread the article "My Longest Day" every day. It unexpectedly brought back long suppressed memories of my introduction to combat.

Arriving for my first tour in South Vietnam in mid-February 1965, I was assigned as deputy battalion advisor in the 9th Division, Army of the Republic of Vietnam (ARVN), located in the Mekong Delta. After in-processing, like everyone else, my initial point of departure was Tan Son Nhut airport. It took a combination of plane, helicopter and vehicles to get to my destination, but my battalion was already in the field. Attaching myself to another that was being sent as reinforcement and travelling on foot, I eventually reported for duty.

ARMY Magazine welcomes letters to the editor. Short letters are more likely to be published, and all letters may be edited for reasons of style, accuracy or space limitations. Letters should be exclusive to ARMY Magazine. All letters must include the writer's full name, address and daytime telephone number. The volume of letters we receive makes individual acknowledgment impossible. Please send letters to The Editor, ARMY Magazine, AUSA, 2425 Wilson Blvd., Arlington, VA 22201. Letters may also be faxed to (703) 841-3505 or sent via e-mail to armymag@ausa.org.

At the time we did not know that early March was the beginning of the Viet Cong (VC) spring offensive. We spent 80 of roughly the next 90 days in the field rushing to locations where VC were sighted or were already in the process of attacking some district center. When moving to contact, my function was always to be with whichever company was leading or had the most critical assignment. The enemy that we engaged usually consisted of the so-called hard-core VC units—veteran troops organized into infantry companies and battalions with experienced officers and arms equal to that of the ARVN. On two occasions the company commander I was advising during a firefight died right next to me. In each instance, I was able to informally take command of the company and complete the mission.

These company commanders were good officers and brave men. Their faces and the faces of other fallen heroes were etched into my mind forever. Years later, the only people who can really understand are those who were part of a similar situation. With those veterans, you don't have to put things into words, because there is some kind of mental connection. We understand each other. When I see someone with a Distinguished Service Cross, there is absolutely no need to ask how he got it.

Even though my combat experiences

do not come anywhere close to the concentrated intensity of "My Longest Day," I can relate to most of the described situations, including the Prelude and the Postscript. I also understand the words "it would take years before I would understand how this day had impacted me in other ways."

Today I feel better. Thank you, LTC William P. Baxter.

1LT PETRO SODOL
1/15 INF BN (ARVN)
Bayside, N.Y.

'Old Soldier' Memories

■ Kudos to MG Guy S. Meloy and ARMY for his April article, "You Might Be an Old Soldier If ... ." It brought back some great and vivid memories, not the least of which was the Friday night "GI party" in our barracks in basic training, preparing for the Saturday morning inspection in ranks (complete with 9-pound rifles) by the company commander and first sergeant. This was followed by inspection of the barracks, with each soldier standing in front of his bunk, footlocker opened, praying we would all pass. If just one person on our barracks floor failed we all failed. But it was truly great training to be a soldier, teamwork being so essential—then and now.

I, too, was Regular Army (RA) and found on my first payday—$50 monthly—that the RA privates (enlisted) stood in line A to Z while the U.S. privates (draftees) stood in line behind us in the company orderly room. If getting a pass, we would (again) stand in line with our rifles in the orderly room to be inspected by the "charge of quarters," normally a corporal. If not clean to his satisfaction—no pass. Try again.

I also recalled promotion to sergeant in Northern Italy with the 88th Infantry Division (The Blue Devils) when the regimental commander, after congratulating four new sergeants, said, "With these three stripes, this is where leadership begins." I never forgot those words during the remaining 39 years I was blessed to serve in uniform and in all components of our Army.

I'm sure many readers of ARMY share similar memories of their time in uniform, and more. For all of us to MG Meloy: "Thank you, sir, for taking us on a wonderful tour of the past and of our service for our republic."

BG PHILLIP J. ZELLER JR., USA RET.
Junction City, Kan.

■ Browsing through my April copy of ARMY Magazine with my morning coffee recently, I started to think that I was an "old soldier." As I skimmed MG Guy Meloy's article, about half of the old soldierisms applied to me.

I have had C-ration coffee in an aluminum cup. I had a white nametag. The first rifle I qualified on was an M1, and I had an M1 thumb to prove it. In ROTC, we carried the M1903 Springfield because we were always the aggressors (Circle Trigon Forever) and could fire it faster than the other cadets could fire their M1s because they had no blank adaptors.

I familiarized myself with an M3 grease gun and received a demonstration of the Browning air-cooled M1919A6 light machine gun. I logged many miles in my jeep as a forward observer in Germany. The jeep had no heater installed because Germany wasn't considered a cold climate (Hohenfels in January would cause anyone to disagree), so my recon sergeant rigged a blow torch between the front seats. I slept in a bunk bed in "World War II-temporary" barracks (with the side-by-side toilets) at Fort Bragg, N.C., in 1966–67. On my first tour in Germany I wore an OG shirt with a pair of field pants made in 1943. I had at least one pair of fatigues with metal buttons with thirteen stars on them. I have fired the 3.5-inch Rocket Launcher (the Bazooka was 2.36 inches).

Most of my senior NCOs were veterans of World War II and the Korean War, but for me, those two conflicts were something I had seen in the movies and on television. At last, I realized that while I had been surrounded by old soldiers early in my career, I was not yet an old soldier. I guess I am a late middle-aged soldier on the verge of becoming an old soldier. At 66 years of age, I am older than all of the active duty colonels and sergeants major I meet; I've been to Vietnam, and they haven't. Maybe I should take MG Meloy's advice and start writing the next "You Might Be an Old Soldier if..." article.

By the way, then-CPT Walter J. Marm, Medal of Honor recipient, visited our Ranger School platoon (Class 4-68) during the mountain phase, but we were too tired and hungry to realize the significance of the visit.

LTC JOHN MANGUSO, USA RET.
San Antonio, Texas

ADVERTISERS IN THIS ISSUE

AM General	Cover III	ITT Exelis Electronic Systems	49, 51
ARMY Green Book	10	Leupold & Stevens	19
Ashford University	22	Lockheed Martin	Cover II, 67
AUSA Annual Meeting	20, 72, 73	Meggitt Defense Systems	33
AUSA Membership	16	Navy Federal Credit Union	9
Avon Protection	25	NovAtel Inc.	23
Bobcat Company	45	Panasonic Toughbook	13
Boeing BDS	Cover IV	Pelican Products, Inc.	59
Caterpillar, Inc.	55	RAM Mounts	69
Cubic Global Tracking Solutions	79	SureFire, LLC	15
DRS Technologies, Inc.	3		
FLIR Systems, Inc.	37		
General Dynamics C4 Systems	7		
Greater Killeen Chamber of Commerce	24		
IHG Army Hotels Group	41		
iRobot Corporation	5		

ADVERTISING. Information and rates available from the Advertising Production Manager or our advertising representatives:

The Audit Bureau

James E. Burke and **Irene Lamar**, 230 Park Ave., Suite 1546, New York, NY 10169. (212) 697-2844. FAX (212) 682-1421. E-mail: advdpt@aol.com.

Agile.

Delivering a single network to all functional areas of the battlefield, even the most remote locations. That's our top priority at General Dynamics. We are working smarter and with more agility to deliver systems and products integrated to support the Joint Force so that Soldiers can more safely and effectively execute their missions.

To learn more, visit **www.gdc4s.com/army**

GENERAL DYNAMICS

©2012 General Dynamics. All rights reserved.
Photo credit: Staff Sgt. Jacob N. Bailey, U.S. Army

Washington Report

DoD Reports on Progress in Afghanistan

In early May, DoD released its semi-annual, congressionally mandated "Report on Progress Toward Security and Stability in Afghanistan." According to the report, the International Security Assistance Force (ISAF) is continuing to build on progress made last year.

Release of the report coincided with President Obama's surprise visit to Afghanistan, where he met with Afghan President Hamid Karzai. The two leaders signed a strategic partnership agreement that maps out the future relationship of the two countries.

The Afghanistan progress report cites positive trends in the six-month period from October 1, 2011, through March 31, 2012, among them a continued decline in enemy-initiated attacks, security progress and the increased capabilities of the Afghan national security forces (ANSF). Despite those signs, however, the campaign faces familiar and long-term challenges. The insurgency's safe havens inside Pakistan, where it refits and regroups, combined with the limited capacity of an Afghan government, remain the biggest threats to "turning security gains into a durable and sustainable Afghanistan."

New USAR Chief. In May, the Senate confirmed MG Jeffrey W. Talley as chief, Army Reserve and commanding general, U.S. Army Reserve Command. Currently commanding general of the 84th Training Command (Unit Readiness), Fort Knox, Ky., he will receive a third star and succeed LTG Jack C. Stultz on June 9.

MG Talley's assignments include platoon leader and adjutant with the 39th Combat Engineer Battalion in Fort Devens, Mass., and civil engineer and environmental engineer with the U.S. Army Corps of Engineers.

From 2002–2003 he served on active duty with the 416th Engineer Command in support of Operation Enduring Freedom/Operation Iraqi Freedom in Kuwait and Iraq. He deployed to Iraq again from 2008–09 as commander of the 926th Engineer Brigade and also served as Baghdad Provincial Engineer.

A graduate of Louisiana State University, MG Talley has a Ph.D. in civil and environmental engineering from Carnegie Mellon University, and an Executive Master of Business Administration from the University of Oxford.

Accountability in Education. To help safeguard the military education benefits of servicemembers and veterans, President Obama signed an executive order designed to end hidden high-interest student loans, nontransferable credits, bogus job placement programs and other scams used to enroll troops and veterans.

DoD, the Department of Veterans Affairs and the Department of Education, in consultation with the Consumer Financial Protection Bureau, will establish principles of excellence that require educational institutions receiving federal educational funds to "end fraudulent and unduly aggressive recruiting techniques on and off military installations." A school must provide clear information about the military student's qualifications and available financial aid before enrollment. The order requires colleges to "provide prospective students who are eligible to receive federal military and veterans educational benefits with a personalized and standardized form" to help them understand the total cost of the program.

Education program recruiting will face tougher restrictions and increased vigilance. In addition, schools will have to step up their support for military students, including providing more counseling and allowing them to be readmitted to a program if they are temporarily unable to attend class or have to suspend their studies due to service requirements.

To use an interactive online tool for determining college costs, go to www.consumerfinance.gov/payingforcollege/. For more information visit www.ConsumerFinance.gov.

VHA Data Unreliable. In a congressionally mandated review of veterans' access to mental health care released in late April, the Inspector General (IG) of the Department of Veterans Affairs (VA) found that the Veterans Health Administration (VHA) mental health performance data is "not accurate or reliable."

In its fiscal year 2011 Performance and Accountability Report, VHA reported that 95 percent of first-time patients wanting mental health care services received full evaluations for care within the required 14-day window. The statistic has no value, says the IG report, because VA reported how long it took VHA to conduct the evaluation, not how long the patient waited to receive it. Using the same data VHA used and projecting data from a statistical sample of completed evaluations, the IG review determined that only 49 percent of new patients received their evaluation within 14 days. It took an average of about 50 days for the remaining patients to receive their full evaluations.

VHA statistics also showed that 95 percent of patients received new patient appointments within 14 days of their desired dates. The IG office projected the VHA completed about 64 percent of the appointments within 14 days. The data for follow-up appointments was similarly unreliable.

VHA data showed that 98 percent received timely care, while the IG office reported about 88 percent had follow-up appointments within 14 days. The failure of VHA schedulers to follow proper procedures distorted the waiting time data.

A new low rate and money toward closing. It really is a buyer's market!

Thanks, Navy Federal! Get into your new home with a great low rate, no application fee, and up to $2,500 toward your closing costs.* Whether you're looking for 100% financing or looking to apply for a VA loan, your personal mortgage rep will guide you through the process. Before you know it, you'll be in your new home. First-time homebuyers can save even more!

ARMY
MARINE CORPS
NAVY
AIR FORCE
DoD

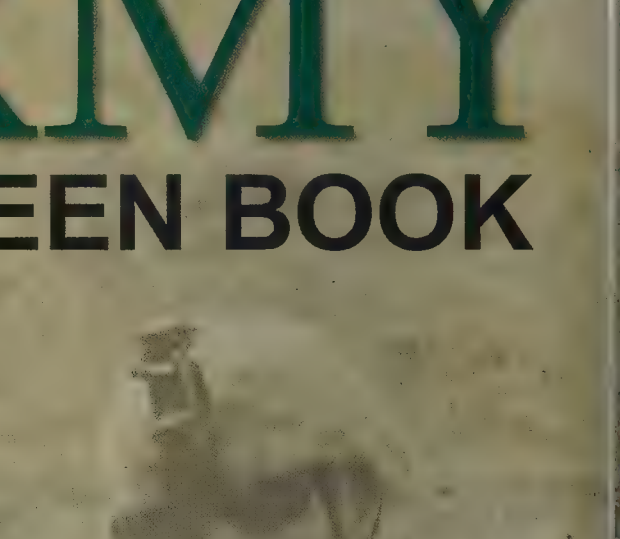
NAVY FEDERAL®
Credit Union
navyfederal.org
1.888.842.6328

Apply today!

Federally insured by NCUA. *Limited-time offer available for all first mortgage purchase loans except HomePath®. Member cannot receive cash back from this offer. Certain restrictions may apply. Ask your loan officer for details. © 2012 Navy Federal NFCU 12025 (3-12)

EQUAL HOUSING LENDER

ARMY
2012 GREEN BOOK



Photos Courtesy of U.S. Army

Your best buy in advertising for reaching Army leaders again and again!

The 2012 ARMY Green Book, which is the October issue of ARMY Magazine, is used by military and government personnel as a yearlong reference tool.

Not only will it be sent to Army leaders who are members of AUSA, it will also be distributed at the Association of the U.S. Army (AUSA) Annual Meeting and Exposition in October. Total circulation of the GREEN BOOK is over 100,000.

Advertising Reservations Due
20 August 2012

Advertising Materials Due
3 September 2012

Advertising Department:

Irene Lamar
Jim Burke
230 Park Avenue, Suite 1546
New York, NY 10169
(212) 697-2844
Fax (212) 682-1421
ADVDPT@aol.com

News Call

U.S. Offensive Strengthens Afghan Security

In what may be the last major U.S. offensive in Afghanistan before 33,000 surge troops redeploy by the end of this summer, U.S. soldiers in April began clearing militants from provinces south of Kabul and conducting short assaults against insurgents in the eastern border region with Pakistan.

Their mission is to attain a high enough level of security that Afghan forces can take responsibility by the end of 2013 and U.S. combat troops can withdraw by the end of 2014. In addition to strengthening security around the capital, troops seek to ensure control of the major highway linking Kabul with the city of Kandahar, a stronghold of the southern insurgency, and to interdict insurgent travel on eastern routes to and from Pakistan.

Vital to the U.S. mission is the 1st Brigade Combat Team (BCT) of the 82nd Airborne Division, which took command of Forward Operating Base Warrior in Ghazni Province in April. The goal of the 1st BCT, which includes the 504th Parachute Infantry Regiment, is to push insurgents from the southern part of Ghazni.

U.S. troops with other coalition forces will conduct short, targeted assaults in Afghan provinces bordering Pakistan, such as Paktika and Paktya, where insurgents infiltrate from neighboring safe havens.

Eighth Army Change. In line with the U.S. shift in focus to the Asia-Pacific region delineated in the Defense Strategic Guidance issued in January, Eighth Army has been designated as an operational-level field army headquarters.

Now integrated with U.S. Army Pacific, it is capable of commanding multiple U.S. and multinational corps in joint and combined operations and exercises operational command and control of U.S. Army forces on the Korean Peninsula.

Eighth Army previously served as the U.S. Army Service Component Command for U.S. Army forces on the peninsula, a responsibility now assumed by U.S. Army Pacific.

Established in 1944, Eighth Army served as the occupational force in Japan and commanded ground forces as the only U.S. field army in the Korean War. Since then it has served as a theater army and Army service component command supporting the United Nations Command, Combined Forces Command and U.S. Forces Korea.

Upcoming Deployments

The Department of Defense has named an Army brigade combat team of nearly 3,900 soldiers to deploy as part of the upcoming rotation of forces operating in Afghanistan. The 4th Stryker Brigade Combat Team, 2nd Infantry Division, Joint Base Lewis-McChord, Wash., is scheduled to deploy early this winter.

U.S. Army/SSG Jason Epperson

From right, SSG Tyler Rux, SGT Robert Addington and SPC Clark Choate, 3rd Platoon, Apache Company, 1st Battalion, 501st Infantry Regiment, Task Force Blue Geronimo, patrol a field near the village of Gorchek in Khost Province, Afghanistan.

CAPE Releases Report. In a report released in April, the Center for the Army Profession and Ethic (CAPE) at West Point, N.Y., listed six essential characteristics of the Army Profession: trust, trustworthiness, military expertise, esprit de corps, honorable service and stewardship of the profession.

The report is the Army Profession Campaign's first annual report. The result of a year-long study, the report's findings and recommendations are based on the feedback of more than 40,000 Army professionals throughout the service who commented not only on the state of the profession but the future.

The report found that 98 percent of the responders considered themselves professionals. It also found that "overwhelming numbers of survey participants … trust other members of their units and their direct leaders." Many junior leaders, however, were convinced that one mistake could ruin their Army career and that they would be punished for offering "too candid" opinions to senior officers.

Based on data gained from the study, the report specified seven focus areas and associated initiatives designed to help in the development of the profession.

- Institutionalized Army profession concepts.
- Building and sustaining trust relations.
- Improving standards and discipline.
- Certifying Army professionals.
- Investing in leader development for the Army of 2020.
- Strengthening the Army's culture.
- Integrating/synchronizing human development.

For more information or to download the report, visit CAPE's website at http://cape.army.mil.

HQ for Lewis-McChord. The Army will establish a two-star headquarters at Joint Base Lewis-McChord, Wash., on October 1. The unit will be designated Headquarters, 7th Infantry Division (which was deactivated in 1994) and will report to I Corps.

The reorganization is a reflection not only of the installation's growth since 2003 but also its strategic importance in DoD's shift in focus to the Asia-Pacific region.

The division headquarters, which will not be deployable, will oversee the training and readiness of some 17,000 soldiers in 2nd, 3rd and 4th Stryker Brigade Combat Teams of 2nd Infantry Division; 16th Combat Aviation Brigade; and 17th Fires Brigade. The new headquarters will also provide an intermediate level of management between the brigades and I Corps, a level that exists at similar large bases such as Fort Hood, Texas, and Fort Bragg, N.C.

1AE Expands Training. As it celebrates its fifth anniversary, First Army Division East (1AE) is expanding its training for reserve component units with two additional missions—the Security Force Assistance Team and Contingency Expeditionary Forces training.

As of early March, more than 140 First Army senior officers and NCOs were training and preparing to deploy for nine months as Security Force Assistance Teams to help Afghan army and police units improve their logistics, intelligence, maintenance, administration and training capabilities during the transition of security responsibility to them.

First Army East's other new mission, Contingency Expeditionary Forces training, will help members of the operational reserve maintain training proficiency. Until recently, 1AE trained only units with valid deployment orders. The withdrawal from Iraq and coming drawdown in Afghanistan, however, combined with the Army's planned reduction in end strength, have created this new mission.

A joint team of nearly 6,000 active duty, Army Reserve and National Guard soldiers headquartered at Fort Meade, Md., 1AE operates across the eastern half of the United States and territories. Originally, 1AE was composed of six mobilization stations and 10 brigades, but it has been transformed over the past five years. It now has three mobilization stations and consists of eight brigades supporting 52

GENERAL OFFICER CHANGES*

LTG M.T. Flynn from Asst. DNI for PE, ODNI, Washington, D.C., to Dir., DIA, Washington, D.C.

LTG T.C. Nicholas from Dep. Dir., SID, NSA, Fort Meade, Md., to Asst. DNI for PE, ODNI, Washington, D.C.

MG R.P. Mustion from Dir., Military Personnel Mgmt., ODCS, G-1, USA, Washington, D.C., to CG, HRC, Fort Knox, Ky.

MG B.G. Watson from Dir., Jt. Engineering Directorate/Cmdr., USACE, Transatlantic Div. (Forward), USF-A, to Dep. Dir. for Jt. and Coalition Warfighting, J-7, Jt. Staff, Suffolk, Va.

Brigadier Generals: **M.L. Brand** from Dep. Chief, Spt./Security Assistance, ODR-P to Dep. Chief, Ops., ODR-P; **S.A. Davidson** from Dep. CG/Dir. of Ops., SDDC, Scott AFB, Ill., to Cmdr., DLA-Distribution, DLA, New Cumberland, Pa.; **F.A. Espaillat**, USAR, from PM CATT (Army Guard Reserve), PEO STRI, Orlando, Fla., to Mobilization Asst. to the Dep. Dir. (IMA), DLA, Fort Belvoir, Va.

■ ***AFB**—Air Force Base; **DIA**—Defense Intelligence Agency; **DLA**—Defense Logistics Agency; **DNI**—Director of National Intelligence; **HRC**—U.S. Army Human Resources Cmd.; **IMA**—Individual Mobilization Augmentee; **NSA**—National Security Agency; **ODCS**—Office of the Deputy Chief of Staff; **ODNI**—Office of the Director of National Intelligence; **ODR-P**—Office of the Defense Representative-Pakistan; **PE**—Partner Engagement; **PEO STRI**—Program Executive Office-Simulation, Training and Instrumentation; **PM CATT**—Project Manager, Combined Arms Tactical Trainers; **SDDC**—Military Surface Deployment and Distribution Cmd.; **SID**—Signals Intelligence Directorate; **USA**—U.S. Army; **USACE**—U.S. Army Corps of Engineers; **USAR**—U.S. Army Reserve; **USF-A**—U.S. Forces-Afghanistan.*

**Assignments to general officer slots announced by the General Officer Management Office, Department of the Army. Some officers are listed at the grade to which they are nominated, promotable or eligible to be frocked. The reporting dates for some officers may not yet be determined.*

Panasonic
ideas for life

intel inside
CORE i5 vPro

Panasonic recommends Windows® 7

Toughbook 31 Toughbook 19 Toughbook U1 Ultra

Access mission-critical information anywhere.
Fully-rugged Panasonic Toughbook® mobile computers, powered by the Intel® Core™ i5 vPro™ processor. Keeping you combat-ready with industry-leading reliability is how we're engineering a better world.

panasonic.com/business-solutions

Intel, the Intel logo, Intel Core, Intel vPro, Core Inside and vPro Inside are trademarks of Intel Corporation in the U.S. and/or other countries. Toughbook notebook PCs are covered by a 3-year limited warranty, parts and labor. To view the full text of the warranty, log on to panasonic.com/toughbook/warranty. Please consult your Panasonic representative prior to purchase. Panasonic is constantly enhancing product specifications and accessories. Specifications subject to change without notice. ©2012 Panasonic Corporation of North America. All rights reserved. Mission-critical. FG. FY12-3

TOUGHBOOK®

SOLUTIONS FOR U.S. MILITARY

Army Casualties in Afghanistan

The following U.S. Army soldiers were reported killed supporting Operation Enduring Freedom from April 1 to April 30, 2012. All names have been released through the Department of Defense; families have been notified.

CPT Michael C. Braden, 31
SSG Andrew T. Brittonmihalo, 25
SSG Christopher L. Brown, 26
SPC Antonio C. Burnside, 31
SPC James E. Dutton, 25
SPC Jason K. Edens, 22
SSG Brandon F. Eggleston, 29
SPC Moises J. Gonzalez, 29
SFC Shawn T. Hannon, 44
SGT Tanner S. Higgins, 23
CW Nicholas S. Johnson, 27
SGT Dick A. Lee Jr., 31
PFC Michael J. Metcalf, 22
SPC Benjamin H. Neal, 21
SSG David P. Nowaczyk, 32
SFC Jeffrey J. Rieck, 45
CPT Nicholas J. Rozanski, 36
PFC Christian R. Sannicolas, 20
SPC Philip C.S. Schiller, 21
SGT Dean R. Shaffer, 23
SSG Tyler J. Smith, 24
SPC Manuel J. Vasquez, 22
CW Don C. Viray, 25
1LT Jonathan P. Walsh, 28
SPC Jeffrey L. White Jr., 21
SGT Chris J. Workman, 33

battalions located at Fort Stewart, Ga.; Fort Knox., Ky.; Camp Atterbury, Ind.; Camp Shelby, Miss.; and Joint Base McGuire-Dix-Lakehurst, N.J.

Since it was activated in March 2007 with the task of mobilizing, training, deploying and demobilizing Army Reserve and National Guard soldiers, sailors and airmen, 1AE has mobilized almost 200,000 servicemembers and demobilized more than 45,000.

3rd Cavalry Welcomes Strykers. Third Cavalry Regiment welcomed 151 Stryker vehicles to Fort Hood, Texas, in April.

The arrival of the vehicles marked the first major step in the two-year conversion of 3rd Cavalry from an armored cavalry regiment to a Stryker brigade combat team. More than 200 additional vehicles were scheduled to arrive later this spring.

According to the regiment's commander, COL John D. Richardson IV, the cavalry troopers are now scheduled to train and qualify and to be ready for deployment by November 2013.

The unit has experienced numerous organizational changes since it was commissioned in 1846 as a "Regiment of Mounted Rifleman" to protect settlers crossing the continent on the Oregon Trail. At the outset of the Civil War in 1861, it became the 3rd Cavalry Regiment. In 1943 it retired its horses for armored vehicles, and after World War II it converted to the 3rd Armored Cavalry Regiment, a combined arms outfit.

Screaming Eagle Received DSC. SGT Felipe Pereira, Company A, 1st Battalion, 502nd Infantry Regiment, 2nd Brigade Combat Team, 101st Airborne Division (Air Assault), received the Distinguished Service Cross (DSC) at a ceremony at Fort Campbell, Ky., in April. The nation's second-highest military honor, the DSC was awarded to SGT Pereira for "distinguished service and heroism" in Kandahar Province, Afghanistan, in 2010.

SGT Pereira, a 28-year-old native of Brazil who became a U.S. citizen two years ago, is the first Screaming Eagle to be awarded the DSC since Vietnam. He joined the Army in March 2009 and deployed to Zhari District of Kandahar Province, Afghanistan, in May 2010.

SGT Pereira was a specialist and squad leader in November when an improvised explosive device detonated during a dismounted patrol, killing two of his soldiers. SGT Pereira suffered shrapnel wounds to his spleen, liver and left lung, which began to collapse as the enemy initiated an ambush. SGT Pereira commandeered an all-terrain vehicle and drove into the oncoming small-arms fire to evacuate wounded comrades. He then returned to help other casualties. "Only after all of the wounded Soldiers had been evacuated and were receiving medical care," reads the citation, "did he accept treatment himself."

SGT Pereira said he was just doing his job. "If you actually stop and think, that's when you start panicking because you don't know what to do," he said. "The key is to keep moving and hope the decisions you're making are

U.S. Army

The arrival of the first of 151 Strykers was celebrated with a champagne christening at Fort Hood, Texas, in April. Fort Hood's Third Cavalry Regiment was the last scheduled unit in the Army to transform to a Stryker brigade combat team.

FIRST WE SUPPRESSED THE SOUND,
MUZZLE FLASH, AND DUST SIGNATURE.
THEN WE SUPPRESSED THE LENGTH.
MADE IN U.S.A.
TSR
TOTAL SIGNATURE REDUCTION
Muzzle blast impairs or destroys hearing and mission-critical communications. Flash and dust signature can give away your position, drawing enemy fire. With a SureFire suppressor all these factors are minimized—significantly—to increase operator lethality. And at only 5 inches—adding just 2.75 inches to your weapon—and 4 ounces, the new SureFire MINI™ won't bog down your weapon. It also offers negligible shift in point of impact from unsuppressed zero, attaches/detaches in seconds, and with its high-temp alloys and redundant welds, it will typically outlast the barrel it's attached to.
SUREFIRE
Visit us at facebook.com/surefire
See the video at: www.surefire.com/suppressors

AUSA
Membership Benefits*

Bank of America, N.A.:
AUSA Bank Card
Start receiving great rewards and show your support for AUSA. Call 866-438-6262.

Institute of Land Warfare:
ILW offers writing programs; conducts conferences and symposia; publishes essays, Defense Reports, newsletters; and provides research on defense issues. Call 800-336-4570, ext. 4630 for details.

AUSA Mastercare Group Insurance Plans:
- Active Duty & Retiree TRICARE Supplement
- Accidental Death and Dismemberment Plan
- 10-Year Level Term Life Insurance Plan
- Group Term Life Insurance Plan
- Short-Term Recovery Plan
- Long Term Care Plan

Call 800-882-5707 for more information.

Dental and Vision Discount Plans:
Discounts offered to AUSA members on dental services and vision exams. Call 800-290-0523.

This plan is not available in the states of MT and VT.

Emergency Assistance Plus:
If you or a family member gets injured or sick while on travel, this plan will provide medical assistance, bring a medical specialist or loved one to your side and much more. Call 888-633-6450 for more information.

Government Vacation Rewards:
AUSA now offers its members discounts on cruises, resorts and tour providers. Call 866-871-9181.

GEICO Insurance – Auto, Home, Condo/Renters, and Boat:
In states where available, a special member discount may apply. Call 800-861-8380.

Apple Member Purchase Program:
Apple Computers offers AUSA members a substantial savings on its computers. Call 800-MY-APPLE and mention you are a member of AUSA.

Book Program:
Members receive discounts on selected military books.

Army Times/Federal Times:
Subscription discounts on Army Times/Federal Times. Call 800-368-5718.

Dell Member Purchase Program:
AUSA members can now receive discounts on Dell PCs. Call 800-695-8133 for more information.

AUSA Career Center:
AUSA members can now post their resumes and employers can advertise any new openings they have. Visit our Web site and go to the Resources drop-down, then Career Center.

University of Maryland University College (UMUC):
University of Maryland University College (UMUC) is pleased to offer undergraduate and graduate study programs to AUSA members worldwide. For some program participants, a discounted tuition rate will apply.

Armed Forces Services Corporation:
AFSC guides you through the details on military entitlements for your retirement and survivor planning/assistance for your spouse. Call or e-mail: 888-237-2872, info@AFSC-USA.com.

Choice Hotels International®:
AUSA members can receive discounts on hotel rooms at the following hotels.

- Comfort Inn®
- Comfort Suites®
- Quality®
- Sleep Inn®
- Clarion®
- Cambria Suites®
- MainStay Suites®
- Suburban Extended Stay Hotel®
- Econo Lodge®
- Rodeway Inn®

Call 800-258-2847 and use the code 00800700.

Car Rental Program:
Use the reservation codes on the back of your membership card and save at:

• AVIS	800-331-1441	• Hertz	800-654-6511
• Budget	800-455-2848	• National	800-Car-Rent
• Alamo	800-354-2322 *(rental for under age 25 available)*		

Publications:
- *ARMY* Magazine every month, including the October *ARMY Green Book*.
- *AUSA NEWS* every month.

* **Member discounts and services are subject to change.**

For more detailed information, visit Members Only Benefits and Services at www.ausa.org
or call Member Support at 855-246-6269 / 703-841-4300

U.S. Army/Sam Shore

Chief of Staff of the Army GEN Raymond T. Odierno presents SGT Felipe Pereira, 101st Airborne Division (Air Assault), with the Distinguished Service Cross in April at Fort Campbell, Ky.

the best decisions that can be made."

Army Chief of Staff GEN Raymond T. Odierno, who presented the award, said, "There is a Portuguese proverb that says, 'Live to live, and you will learn to live.' ... This is a man who has lived to live and through his heroic acts of valor inspired and allowed others to live as well."

Power and Energy Lab Opens. In April, the Army opened its new Ground Systems Power and Energy Laboratory (GSPEL) at the U.S. Army Tank Automotive Research, Development and Engineering Center in Warren, Mich.

The 30,000-square-foot facility houses eight laboratories in which the Army will test vehicle systems and components under a variety of conditions.

Research conducted there will aim for reduced fuel consumption and increased fuel efficiency. The complex is equipped to test every type of manned and unmanned wheeled vehicle in the U.S. military.

At the GSPEL opening, LTG Raymond V. Mason, Army deputy chief of staff for logistics, stressed that reducing fuel consumption will also reduce soldiers' combat risk. On average one in every 46 resupply convoys encounters problems. "About 80 percent of the convoys that are traveling on the roads of Afghanistan right now are carrying fuel," he said.

The Power and Energy Vehicle Environmental Lab, the centerpiece of the new facility, enables simulation of a variety of terrain from locations throughout the world and full mission testing under a variety of environmental conditions, in temperatures ranging from minus 60 to 160 degrees Fahrenheit, relative humidity of up to 95 percent and wind speeds of up to 60 miles per hour.

The new GSPEL supports the Army's energy initiatives in another way: It is the first DoD lab designed and built to meet Leadership in Energy and Environmental Design (LEED) Silver certification criteria. LEED helps identify effective design, construction, operation and maintenance of "green" buildings. Official LEED certification awaits final review.

MoH Awarded to Vietnam Vet. Army SPC 4 Leslie H. Sabo Jr., a rifleman with the 101st Airborne Division during the Vietnam War, was posthumously awarded the Medal of Honor in May for his actions in eastern Cambodia in May 1970. His widow, Rose Mary Sabo-Brown, and his brother, George, represented him at the ceremony.

SPC Sabo, then 22, saved the lives of several of his comrades when his platoon was ambushed from all sides by a large North Vietnamese force near the Se San River. SPC Sabo charged the enemy position, killing several of the soldiers, and then assaulted an enemy flanking force, drawing fire away from his unit and forcing the North Vietnamese to retreat. An enemy grenade landed nearby as the platoon secured a resupply of ammunition, but SPC Sabo picked it up, threw it and used his body to shield a wounded comrade from the blast. With shrapnel embedded in his back, he continued to charge the enemy emplacement through automatic weapons fire. He was hit several times but crawled close enough to throw a grenade into the bunker. "The resulting explosion," according to the White House release, "silenced the enemy fire, but also ended Specialist Sabo's life. His indomitable courage and complete disregard for his own safety saved the lives of many of his platoon members."

SPC Sabo's unit nominated him for the Medal of Honor soon after his death, but the paperwork was lost for decades. In 1999, Tony Mabb, a Vietnam veteran of the 101st and a writer for the *Screaming Eagle* magazine, came across a file on Sabo while doing research at the National Archives military repository in College Park, Md. He contacted his congresswoman, Corinne Brown, who recommended DoD reconsider the Medal for Sabo and pushed through a waiver of the statute of limitation, which limits the awarding of the Medal to within three years of the recipient's act of valor.

Best Rangers/Best Sappers. In April the Army announced the winners of the annual Best Rangers and Best Sappers competitions. MSG Kevin Foutz and SFC Thomas Payne from the U.S. Army Special Operations Command won the 29th Annual David E. Grange Jr. Best Ranger Competition at Fort Benning, Ga. CPT Mike Kendall and SSG Frank Batts, 82nd Airborne Division, took first place in the Best Sapper Competition at Fort Leonard Wood, Mo.

The Foutz-Payne team won the cov-

SSG Frank Batts (left) and CPT Mike Kendall display the 2012 Best Sapper trophy. Below, MSG Kevin Foutz (right) and SFC Thomas Payne took home 2012 Best Ranger honors.

U.S. Army

U.S. Army

eted Colt 45 pistols awarded to the Best Rangers over 49 other teams during the three-day competition. Only 34 teams finished.

The largest field yet—38 two-man teams—competed in the Best Sapper Competition, a centerpiece of the Army Engineer School's annual regimental conference. They competed on a course of 50 miles over a period of 50 hours. In addition to overcoming physical challenges such as a gas-mask run and rappelling a 100-foot cliff, they dealt with day and night land navigation problems and thermal breaching exercises.

FED Bravo Debut. In late April, the Army debuted its latest concept vehicle, the Fuel Efficient Ground Vehicle Demonstrator (Bravo Version)—FED Bravo—at the Society of Automotive Engineers 2012 World Congress in Detroit, Mich. The Bravo version of the concept vehicle significantly improves fuel economy over the Alpha version shown to the public last fall, and, unlike the Alpha, it can generate and export electric power to soldiers in severe environments such as Afghanistan.

When plugged into a microgrid, the FED Bravo can provide power at forward operating bases and other small military outposts, thus reducing power requirements and improving soldiers' efficiency. In addition, the engine turns off automatically when idling, improving fuel efficiency.

Funded by DoD, the FED Bravo was developed by engineers at the Army's Tank Automotive Research, Development and Engineering Center in Warren, Mich., along with industry partner World Technical Services, Inc. ★

U.S. Army

The Army's latest concept vehicle, the Fuel Efficient Ground Vehicle Demonstrator, or FED Bravo, was introduced in late April at the Society of Automotive Engineers 2012 World Congress in Detroit.

SOFIC BOOTH # 1334
NDIA JOINT ARMAMENTS CONFERENCE BOOTH # 321

BUILT FOR BATTLE

THE US MILITARY'S NEXT-GENERATION LEUPOLD TACTICAL OPTICS ARE NOW IN SERVICE ON TODAY'S BATTLEFIELD. DESIGNED, ENGINEERED, MACHINED, ASSEMBLED, AND RELENTLESSLY TESTED IN OREGON, USA.

INSIST ON MARK 4™ AND MARK 8™ MOUNTING SYSTEMS FOR THE MOST DEMANDING APPLICATIONS.

LEUPOLD
TACTICAL OPTICS

AVAILABLE NOW @ 1-800-LEUPOLD #4
TACTICALOPTICS@LEUPOLD.COM | WWW.LEUPOLD.COM
PORTLAND, OREGON, U.S.A.

ASSOCIATION OF THE UNITED STATES ARMY

2012 AUSA

ANNUAL MEETING AND EXPOSITION

A Professional Development Forum

22-24 OCTOBER 2012

Walter E. Washington Convention Center, Washington, DC | www.ausa.org

FOR MORE INFORMATION CONTACT:

AUSA, Industry Affairs

1-800-336-4570 • 703-841-4300 • Fax: 703-243-2589

Front & Center

Happy Birthday, Army

By GEN Frederick J. Kroesen
U.S. Army retired

June 14th, 1775, is the birthday of the United States Army. That year the Continental Congress, recognizing the value of military power as important to the quest for redress of laws, taxes, restrictions and demands of the British government, authorized the forming of 10 companies of infantry. In short order that first soldier organization of about 1,000 began an evolution that 170 years later, during World War II, reached a strength of about 8 million soldiers and civil employees and today is the 1-million-strong professional force that is the envy of all other nations.

The growth of the Army must have begun when one of those first commanders realized that a cannon would add significant firepower, and thus the field artillery arm was born. Another discovered a "self-help NCO," and the corps of engineers came into existence. The need for food, water, weapons, ammunition, uniforms and tentage begot the quartermaster and ordnance corps. Battlefield communications identified the need for the signal corps, and battle casualties demanded a medical department. The need for special qualifications grew as other capabilities developed, and justification for more branches of the service continued throughout our history. The advent of motor vehicles brought the armor and transportation branches during World War II, and the helicopter and air mobility spawned the aviation branch during the Vietnam War. Aerial threat divided the artillery branch, creating air defense for a few years before budget limitations caused the two branches to recombine.

The total number of branches is more than 20, but the number is complicated by such questions as whether the medical corps, the nurse corps, the dental corps, veterinarians and medical service—all of which have distinctive insignia—are five branches or only one. The need for our branch structure has always been controversial. Fifty years ago there was a move to eliminate the technical services by combining them into one logistics branch when the co-star organizations were formed, co-star being the combining of the support services into maintenance, supply and transportation battalions and support commands. The quartermaster, ordnance, transportation, medical and engineer branches have survived, however, because they do in fact justify specialized education, training, qualifications and doctrines for employment. In addition, there are always proposals for new branches. The airborne community at one time wanted to be a separate branch, but wiser heads prevailed and only the Special Forces wear different insignia. Do we need acquisition or public affairs branches? There are advocates who think so. Will we want a cyber warfare branch?

There is no ultimate organizational structure for the Army. It has been modified by every war and by the advance of technology. Today, it is restructured as brigade-based, designed to be the mobile, versatile and agile force required to respond to threats to our national interests and to fulfill our commitments to allied nations.

Today's Army, however, is also worn and tattered, equipped with obsolescent materiel, manned by personnel severely overcommitted in the wars of the past decade, and now faced with drastic reductions of its authorizations and budgetary support.

The wear and tear on soldiers and their families in the past 10 to 12 years caused by the inadequate structure of the Army has caused alarm and interest among our commanders, psychologists, psychiatrists and other medical personnel and is now the subject of major studies attempting to chart a course for the future. Meanwhile, the Army is manned with large complements of soldiers suffering from post-traumatic stress disorder, wounded warriors who want to return to duty, and a constant percentage of pregnant women, all of whom are nondeployable but who count against the Army's authorized end strength.

World peace is not at hand, and, unfortunately, the potential threats to the nation, once identifiable and countered during the Cold War, have evolved to add altered strategies and tactics that have confounded our capabilities. At the same time the old known threats of nuclear warheads, long-range missiles, chemical vulnerability and the modernization of massive land armies continue to be of concern. They prove again the need for our forces to be able to cope with the full spectrum of warfare and multiple contingencies. This year there is also the challenge of coping with a change in the National Military Strategy that seeks to minimize the role of the Army, focusing on a single theater and relying on firepower to win wars. Studies of the new air-sea battle strategy are being conducted without the Army participation that might alter the concepts.

This year is not a time to celebrate. We have not won the wars we are engaged in. It is, rather, a time to acknowledge and appreciate what the Army has accomplished in its 237 years and to encourage its leaders and rank and file to remain dedicated and resolute as they guarantee the future freedom of our nation. It is a noble cause and an honorable pursuit, time-tested and rewarding principally because of the personal satisfaction of being a contributor to a successful effort in a vital mission.

Happy Birthday, Army, and best wishes for unlimited returns of the day still at the acme of the military profession, still Army Strong. □

***GEN Frederick J. Kroesen**, USA Ret., formerly served as Vice Chief of Staff of the U.S. Army and commander in chief of U.S. Army Europe. He is a senior fellow of AUSA's Institute of Land Warfare.*

Education, Experience and Training: Responsibilities to the Army as a Profession

By LTG James M. Dubik
U.S. Army retired

Discussions concerning the defense budget cuts and associated force structure and modernization decisions are already taking up much of the Army's horizon. These are important subjects; they represent decisions that will affect the Army for the coming decade and beyond. The Army is facing another budget decision, however, one that is much more fundamental than the others: how to address Army leader education, experience and training.

During the last 10 years of war, the Army decided to alter its standard "select, train, and promote" model. The near-absolute pre-9/11 requirement for an officer or an NCO to attend professional-development school before promotion to the next rank was suspended. War requirements precluded, the argument ran, following the pre-war norm. The Army also decided to narrow leader assignments. Officers were kept in command or other essential positions for extended periods in order to preserve unit cohesion in preparation for and conduct of a rotation into a war theater. The same standard applied to NCOs. Frequent rotations resulted in many leaders, officers and sergeants having sequential troop assignments, leaving little time for education or for broadening assignments. Finally, the Army focused its training narrowly on a "road to war" preparation for deployment, again entirely necessarily.

The powerful argument to suspend professional education, narrow assignments and focus training reflected the realities of war. The result: increased unit cohesion and stability in a unit's set of leaders, and increased trust and competency that follow from that cohesion, stability and the focused road to war training programs. These conditions were huge combat multipliers, and the tactical performances of Army units and Army leadership were indicative of the positive results of this cohesion-stability-focused decision. There were negative consequences as well, however.

The Army now has a set of lieutenant colonels, colonels and senior NCOs—in both the active and reserve components—who are less than fully prepared for senior leadership. That these leaders are immensely qualified in combat leadership is unquestionable, and the importance of this qualification cannot be overrated. Fighting experience and combat leadership provide the foundation for all senior leadership—officer and NCO.

AU / 2012

DUTY.
HONOR.
EDUCATION.

Ashford University is shaping the future of today's Army.

Complete your degree at home or abroad. Discover a supportive learning community designed for you to go to school while you serve. Ashford's digital tools allow you to keep in touch with your courses while on the go.

Even deployment doesn't mean your education is over – you can continue while deployed or pick up where you left off when you return. To learn about all your benefits, contact Ashford today.

Call 888.243.1059 or visit military.ashford.edu/AUSA today.

Accredited by The Higher Learning Commission and a member of the North Central Association (ncahlc.org).

Benefits subject to eligibility. Visit military.ashford.edu for complete eligibility requirements. 400 North Bluff Blvd. Clinton, IA 52732

Ashford UNIVERSITY™

12AUAM0606 • AC-0155

The skill set demanded of Army senior leadership, however, is greater than combat leadership. The Army expects its senior leaders to understand more than tactics, regardless of how complex those tactics may be. Colonels run large portions of the Army; lieutenant colonels and colonels are the pool of potential general officers. To run the Army and provide senior executive leadership, lieutenant colonels, colonels and generals—regardless of component—need experience in major headquarters and an education in how the Army runs; how the Army fits into the larger set of national security institutions; how leadership requirements change from the tactical, through the operational, to the strategic levels; and how, as an institution, the Army contributes at the community and national levels in a civil-military environment. Similarly, NCOs without varied experiences and appropriate professional education are also handicapped relative to the demands of senior leadership. Sergeants major and command sergeants major with very narrow developmental and educational experiences simply cannot serve at senior levels as effectively as these positions demand.

Simply put, the Army's future rests not just on the backs of senior leaders and their fighting ability but also, and perhaps more important, on their intellect and the variety of their experiences. Ten years of war have necessarily overdeveloped one aspect of the Army's corporate brain and experience base, while other aspects were underdeveloped. This begs the question: How will the Army address this developmental challenge, especially in this period of reduced budgets?

The fact remains that not much can be done about missed assignment experiences. The Army must do its best to assign officers and NCOs to positions that widen their leadership experience base by means of professional education and training, which offer more options.

Some people have suggested that we give "constructive credit" to those leaders who have missed developmental schooling. Bureaucratically, and probably from a budgetary perspective, constructive credit makes sense, but that is the easy solution. The personnel system can plug in the proper codes, which won't cost the Army much, and the institution can then return to "normal" more quickly. As a profession, however, the Army would be making a big mistake if it took this approach.

The problem is a complex one. The officer problem differs from the enlisted, and the problem in the active component differs from that in the reserve components. Perhaps some constructive credit is necessary, but to wipe the slate completely clean by policy declaration seems more than inappropriate; it seems wrong. Not only will the solution create wide disparities—education and experience gaps—among the components of the Army, but it also will diminish the Army as a profession.

Professions develop and promulgate expert knowledge. Professions set and enforce standards of leader-

ship expertise in the effective and ethical application of that expert knowledge, and professions ensure that such knowledge and expertise—the basis of trust between a profession and its clients—are transferred to each generation of professionals. American political leaders and citizens—the military profession's clients—trust the military to provide common defense and competent, ethical leadership to citizens who become soldiers, which means that the profession's expert knowledge includes more than combat leadership. To acknowledge underdeveloped areas of expert knowledge and its application and then ignore these areas by giving constructive credit to too wide a population not only produces less than proficient leadership but also breaches professional faith.

The Army needs fully experienced and educated leaders. The Army's immediate future requires leaders with a full set of competencies—leading, developing and achieving—at the direct, organizational and strategic levels. The immediate future also requires that Army leaders be experts in the full range of leader behaviors—influencing, operating and improving—also at these levels. Finally, the immediate future needs leaders of character, presence and intellect. Leadership abilities in all three of the foregoing categories result from varied experiences, progressive education and broadly focused training. Constructive credit for missed professional education will not help generate these abilities; instead, it will denote their absence.

The Army's long-term future as a profession requires close attention to the development and transfer of expert knowledge and its application. The profession's jurisdiction over knowledge, transfer and application has been eroding for at least 20 years and has accelerated in the last 10.

For the past 20 years, the availability of information has given nonprofessionals access to the body of professional knowledge that was once the sole jurisdiction of the profession. This form of erosion is a natural consequence of information technologies, and it will not be reversed. The trend puts a greater demand on the profession with respect to the understanding of the complete body of professional knowledge as well as its competent and ethical application.

This same period has seen a second form of erosion in a slowly shifting jurisdiction for the development and transfer of expert knowledge from uniformed Army officers and NCOs to civilians and retired military leaders. This shift has changed the cadre responsible for doctrine development and teaching in Army schools. While understandable, necessary and useful from some perspectives, the cumulative effect of this trend represents a significant change in critical conceptual and educational elements of the Army's professional life.

Giving constructive credit carte blanche for missed professional education would cause erosion of a third sort. Such a policy would communicate to Army leaders that progressive education is not really essential in the military profession and that what a leader learned in combat is all that is necessary. Neither reflects reality, and both ignore the fact that the Army's future lies with a set of leaders—officers and NCOs, active and reserve components—who are broadly educated and widely experienced.

Training is the other core method by which the military profession transfers expert knowledge and its application. This method of transfer has also eroded in the Army during 10 years of narrow focus on application in one primary form of war and an overly centralized road to war approach to prepare units for deployment. Recognizing this focus and approach as understandable and necessary does not mean one cannot also recognize both as erosive. Neither the focus nor the approach is healthy for the profession over the long run.

While budget cuts, reduced force structure and end strength, and loss of modernization funding may be the headline items requiring urgent attention, attending to the health of the Army as a profession—that is, struc-

turing a suitable, nuanced, multifaceted approach to the education and experience gap and redressing Army training—may well be much more critical. The Army will not be able to have a one-size-fits-all policy; the problem is too complex. Army leaders will have to use constructive credit as part of whatever set of solutions it designs, but such use must be the exception, not the norm. Finally, the Army will have to find new ways to educate, ways that complement its current set of resident, nonresident and mobile training team approaches as well as create new curricula for its courses. All crises have hidden opportunities for innovation.

U.S. Army/Jonathan Koester

MSG Jason Boorn addresses a class at the Electronic Warfare School at Fort Sill, Okla. The Center for Army Leadership seeks input from NCOs on the positives and negatives of Army culture and leadership.

The Army is lucky to have the set of senior leaders—civilian and military—it has now. As a set and as individuals, all have spoken about the Army's future being in its soldiers and leaders, about the importance of professional education and broad experience, and about resetting Army training. One of the difficulties will be translating these acknowledged requirements into a set of policies that match the complexity of the problem and are actionable in the world of reduced budgets. Another will be that the onus of conceiving, developing and implementing the solutions to this complex problem will fall on some of those whose education and experience have been stunted for the past decade. □

***LTG James M. Dubik**, USA Ret., is a former commander of Multi-National Security Transition Command-Iraq and a senior fellow of AUSA's Institute of Land Warfare.*

Mission Command: Do We Have the Stomach For What Is Really Required?

By COL Tom Guthrie

Do we really have the stomach for implementing mission command, or is this concept a passing fancy, the Army's current bright shiny object? If we intend to truly embrace mission command, then we should do it to the fullest, and that will require commitment to changing a culture from one of control and process to one of decentralization and trust. We cannot afford to preach one thing and do another.

FM3-0 *Operations* defines *mission command* as "the exercise of authority and direction by the commander using mission orders to enable disciplined initiative within the commander's intent to empower agile and adaptive leaders in the conduct of full spectrum operations. It is commander-led and blends the art of command and the science of control to integrate the warfighting functions to accomplish the mission."

Army leadership is mission-command leadership and vice versa. Good leaders tailor their leadership approach according to the mission; the operational environment; and the experience, training, proficiency, and skill of their staff and their subordinate leaders and units. Based on these and other factors, commanders decide if more control or decentralization is required. This is not new and has not changed with mission command, but it does imply that a certain amount of decentralization is required for mission command to be successful, and this is where the Army might resist completely embracing mission command, for true decentralization would require leaders to accept the fact that they will be consciously abdicating the responsibility of the outcome to subordinates. If we cannot embrace that sort of true decentralization then mission command in execution will be viewed as hypocritical.

The phrase "centralized planning and decentralized execution" has been around for decades, but in application it typically means that the centralized planning headquarters establishes three back briefs and seven in-process reviews before the decentralized executors are approved. Mission command philosophies, however, go much deeper than that.

Words like a*gility, initiative, intent, empowerment, mission orders* and *adaptability* all point to the condition of decentralization under a most important umbrella: trust. Without trust, mission command—as a routine practice and warfighting function, in garrison and in combat—has little hope. With trust, all of the desired effects within mission command's definition are possible.

Trust must be earned, both by leaders and subordinates. It is developed over time through personal and professional interactions and dialogue over all issues from the simple ones to those of the most difficult nature. You do not earn trust simply by being "the boss."

Most every leader I have known likes the notion of being provided an environment in which he or she is given the mission, the intent and the appropriate resources, and is then trusted to accomplish the mission. I am not so confident, however, that the "receiving" leaders are as willing to pass that environment downward. If leaders only want mission command to exist above their level, then we will be limiting its intended and desired effect.

A Hypothetical Division

At the request of a brigade combat team commander, the division commander agrees that the quarterly training brief process in its current form is actually irrelevant since all resourcing windows associated with the upcoming third quarter training had to be submitted in the first quarter. The division commander adjusts the process and moves to semi-annual briefs and directs that the April through September period be briefed in November so that his decisions and priorities for resources can actually be implemented.

A battalion commander issues his vision and intent for the next year's training. Desired outcomes and objectives are understood, and the company commanders develop their plans to reach them. Each is different: Company B decides, for many reasons, that it will conduct physical fitness training (PT) at 1500 daily from October through December instead of 0630 like the rest of the battalion. Company C decides that in order to practice decentralization and build trust, the company will hold no company- or platoon-level formations for the next six months. Company A removes the company bulletin board because someone found a digital application that can post training schedules and policies virtually through everyone's cell phone.

The battalion staff discovers a flexible training management system that works well for the commander as well as the companies, and a battalion commander decision makes weekly training meetings obsolete. The battalion has only one training meeting a quarter now.

In the Institutional Army

In the previous example, a mission command climate exists in such a unit, but are we ready to embrace this cultural shift? Or will we insist that Company B do PT at 0630 like everyone else? Will we demand that Company C post written policies and the training schedules back on the bulletin board? Could we possibly allow a battalion to *not* have a weekly training meeting? It is my understanding that the intent of our most senior leaders toward the institutional Army is to train and educate

our leaders to be agile, adaptive, critical and creative thinkers who will succeed in any 21st-century environment. I doubt that the traditional, standardized, doctrine-based and sometimes unimaginative institutions of an earlier time can achieve that intent. To prepare the sort of leaders we need, our institutions must possess similar attributes.

In an effort to achieve that intent, subordinate commanders have already issued more specific guidance.

- Replace instructors with facilitators to engage learners to think and understand the relevance and context of what they learn.
- Tailor learning to the individual based on a pre-test or other assessment.
- Replace instructor-led slide presentations with virtual and constructive simulations, gaming, or other technology-delivered instruction.

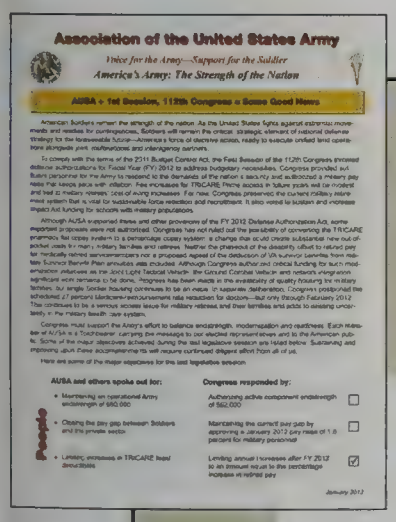
This allows innovation to take place within some left and right limits (that can and should be challenged) that account for accreditation, resource and other considerations.

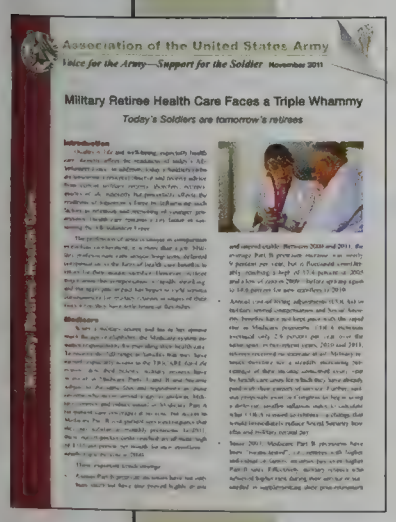
Despite our best efforts to publish coherent, thorough guidance rapidly, those charged with carrying it out—the leaders running our learning institutions—inevitably encounter gaps where strategy, concepts and intent don't line up with rules, regulations and policies. When leaders operating under mission command encounter a gap, they might be expected—trusted—to apply judgment and exercise initiative—attack through the gap, so to speak. Unfortunately, in our institutional Army, our leaders too often choose another course. Instead of seizing an opportunity, they dig in; fill the gap with mines and wire; hold their positions; and wait for instructions.

Who can blame them? For generations we have been conditioning our institutional commanders and leaders to respond to mandates, go by the book, and stick to the checklist. How many times have we invoked phrases like "here's what right looks like," "that's not in the lesson plan" and so on? When we're trying to replicate the complexity of the operational environment in the classroom, why would we insist that a lesson plan survive unaltered after contact with our students, a new tactic, technique or procedure, or late-breaking current events?

Leaders who embrace mission command would acknowledge the fact that not every instructor will teach or train every class the same way, that *not* doing so would be perfectly acceptable. In fact, they would expect and demand it to be that way. A sergeant first class instructor who tweaks his program of instruction to best reach his particular group of students should be commended for his initiative, not admonished.

Mission command succeeds in a free-energy-dominated environment that values, promotes and demands innovation, creativity and initiative. Will the Army default to its fixed-energy natural state imbued with rules, regulations and policies? When "bad" things happen under mission command, will we feel the need to control the outcomes better by increasing the


Association of the United States Army
Voice for the Army—Support for the Soldier
America's Army: The Strength of the Nation
AUSA • 1st Session, 112th Congress • Some Good News
AUSA and others spoke out for: / Congress responded by:
People
• Maintaining an operational Army endstrength of 562,000 — Authorizing active component endstrength of 562,000
• Closing the pay gap between Soldiers and the private sector — Maintaining the current pay gap by approving a January 2012 pay raise of 1.8 percent for military personnel
• Limited increases in TRICARE fees/ deductibles — Limiting annual increases after FY 2012 to an amount not to the percentage increase in retired pay
January 2012


Association of the United States Army
Voice for the Army—Support for the Soldier November 2011
Military Retiree Health Care Faces a Triple Whammy
Today's Soldiers are tomorrow's retirees
Introduction
Soldiers

Help AUSA continue to be the Voice for America's Army

The Institute of Land Warfare (ILW), the educational arm of AUSA, publishes papers and Torchbearers that educate the Administration, Congress and the general public on issues directly affecting America's Army and our Soldiers.

The printing of these papers costs money and ILW, as a non-profit, must depend on contributions. Help ILW continue to ensure that America has the strongest Army possible and that our Soldiers are taken care of.

For more information, please contact Millie Hurlbut at 703-907-2679 or mhurlbut@ausa.org.

THE INSTITUTE OF LAND WARFARE • AUSA •

approval level on a particular issue?

We may think that our smart cards and smartphones and smart cars are making a smarter planet. The truth is that the most agile, adaptive, intelligent system on the battlefield or anywhere else in our Army is a human being. We will spend billions of dollars researching how to improve the network, but it will mean little if we don't focus our energies on command climates and environments that develop the human foundation—trust, initiative, dialogue and freedom of action within intent—that will allow mission command to thrive throughout our Army and our institutions to become as agile as our operating forces.

Even in these times of diminishing dollars, spending billions will be easy compared to changing the climate and the culture. *That* will take stomach. □

COL Tom Guthrie *is a 26-year U.S. Army Infantry officer who has commanded at all levels from company to brigade. He previously served as the chief of current plans for the International Joint Command-Afghanistan and is currently the director of the Center for Army Leadership at Fort Leavenworth, Kan.*

Another Army Birthday

By BG Harold W. Nelson
U.S. Army retired

As we commemorate the U.S. Army's 237th birthday, an observation by one of our great Cold War leaders, GEN Andrew J. Goodpaster, is apt: "One legacy of the Cold War is thinking of the use of military force in terms of either doing nothing, or employing overwhelming forces in a decisive manner. Such thinking is no longer appropriate. A middle ground involving a more modest use of international force —in a limited but persistent manner— demands more attention."

The trend GEN Goodpaster observed in the mid-1990s has surely continued into the present. While unit rotations to Iraq have ended and an end to similar rotations to Afghanistan may be in sight, there will still be lots of soldiers engaged in persistent international efforts in widely scattered global commitments.

The Army is rooted in persistence. It was born in the siege of Boston, and siege warfare was the essence of persistence in 18th-century warfare. Soldiers endured unbelievable hardship and daunting battlefield reverses as they fought on to final victory with another siege at Yorktown.

Most soldiers left the Army after independence had been won. By 1789, when the Constitution was ratified, the Regular Army numbered only 718 officers and troops. The primary instrument of homeland defense was the militia, but it was generally neglected in the populous eastern states as the frontier extended farther west.

U.S. Army

When war was declared on Great Britain shortly after the Army's birthday in 1812, the Regular Army had grown to 6,686 officers and troops, a force that clearly was inadequate for wartime needs. Many domestic critics of the war quoted the constitutional power of Congress to "provide for calling forth the militia to execute the laws of the union, suppress insurrections and repel invasions." Several governors insisted that since invasion was not imminent, state forces could not be called into federal service and, if federalized, could not participate in foreign ventures.

In this political environment, Congress increased authorizations for Regular Army formations. Winfield Scott and his regulars received widespread praise after standing up to British regulars at Chippewa and Lundy's Lane, but historians have pointed out that it was Scott's effective training of raw troops rather than their Regular Army status that shaped their battlefield performance. Unfortunately, the debate over militia versus regulars, which began with sharp differences 200 years ago, would influence arguments for nearly a century. As we observe the bicentennial of the War of 1812 we need to do all we can to project our "one Army" worldview back to those far-off days.

Communities that will be central to commemorating events of the War of 1812 understandably fear that the sesquicentennial of the Civil War will overshadow their efforts. The sesqui-

centennial has already gained some momentum since it started last year. It observes events of a much larger war that is rooted in a much larger part of the country, engaged far more soldiers and had far greater policy implications. When the Army observed its birthday in 1862, Robert E. Lee had just taken command of the Confederate forces in front of Richmond (soon to gain fame as the Army of Northern Virginia), Stonewall Jackson was concluding his magnificent campaign in the Shenandoah Valley, "Jeb" Stuart was in the midst of his ride around the Army of the Potomac and George McClellan's Peninsula Campaign was about to be wrecked.

Out west, New Orleans was in Union hands, and Henry Halleck had finally taken Corinth, Miss., a combination of victories linked to McClellan's difficulties that would lead President Lincoln to name Halleck General-in-Chief. Long hard years of war remained. Units on both sides in that terrible war are the ancestors of many of the fighting units in today's Army—either National Guard or active Army. The Civil War streamers on the Army flag are blue and gray for a reason—we trace our roots back to both sides in the War Between the States, and the Army has been an integral part of efforts at reconciliation that began almost as soon as the war ended.

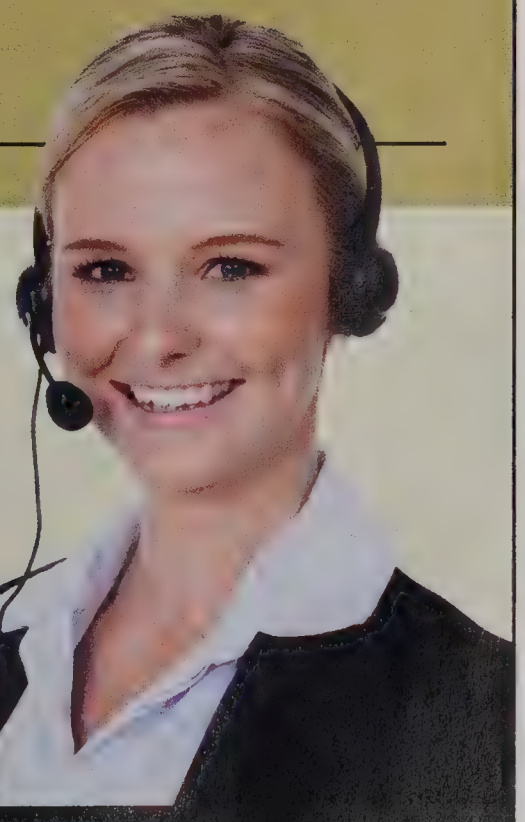
It's tempting to continue recounting the wartime experiences of our great Army as we observe its birthday, but in times like these it may be more important to recall the breadth of its services to our nation. The skills it has developed to conduct sustained operations against armed foes stand it in good stead in accomplishing other complex tasks. Its support of civil authorities ranges from controlling mobs to responding to hurricanes, floods and earthquakes. Its contribution to medical research stretches from the control of yellow fever to advanced neurological treatment regimens for today's veteran. Its role in infrastructure development began with mapping new acquisitions and continues in the management of waterways.

The challenge to our soldiers today is to balance this broad range of services with the call for persistent engagement in international teams that deal with situations requiring trained, disciplined ground forces. The nature of those engagements may change, perhaps assisting in training European formations rather than training large numbers of our own units, but the need has not diminished. Armies from every part of the world seek opportunities to send their leaders to our schools, to participate in training and simulations with our soldiers and, if necessary, to join us in the defense of freedom. That status has been earned through the selfless service of the countless soldiers who have contributed to 237 years of Army history. □

***BG Harold W. Nelson**, USA Ret., is a former U.S. Army Chief of Military History. He has served on the faculties of the U.S. Military Academy, the U.S. Army Command and General Staff College and the U.S. Army War College.*

ANNOUNCING

AUSA's Member Support Call Center



Our new call center is up and running.

The call center will answer AUSA membership related questions and concerns.

855-246-6269 DIRECT DIAL

ASSOCIATION OF THE US ARMY | 2425 Wilson Blvd. | Arlington, VA 22201

MISSION COMMAND

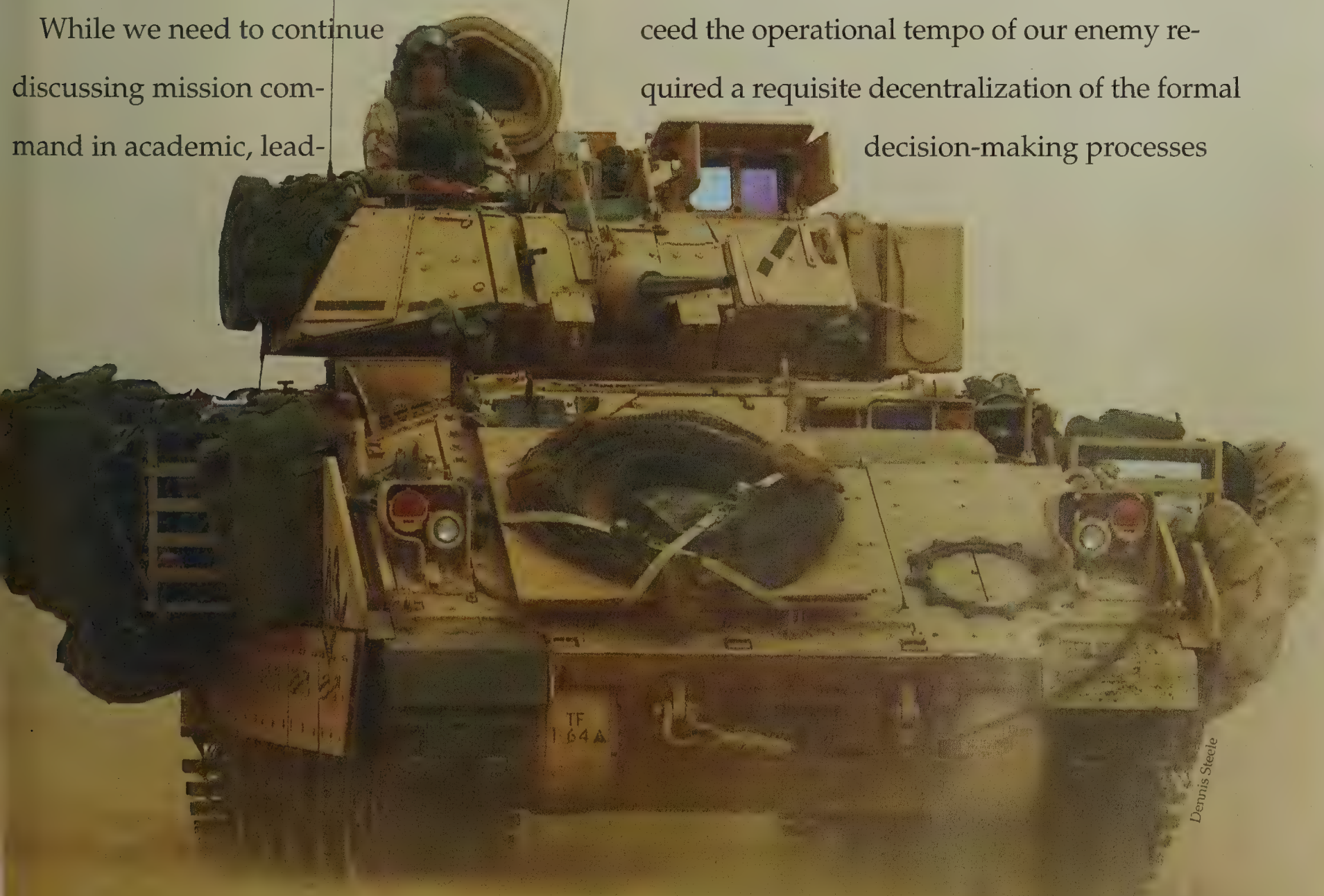
Reflections from the Combined Arms Center Commander

By LTG David G. Perkins

There has been a lot of discussion recently on the doctrinal adoption of mission command and the adaptations to the force that come with it. Army leaders have chronicled the development of mission command doctrine, the establishment of the Mission Command Center of Excellence at Fort Leavenworth, Kan., and the creation of the mission command network. These initiatives were begun to drive institutional adaptation within our Army necessary to meet today's complex strategic environment.

While we need to continue discussing mission command in academic, leadership and other forums, we should recognize that our Army has a certain familiarity with mission command principles. Our entrance into Kandahar and Baghdad marked the beginning of a transition to decentralization and empowerment for our Army upon which we continue to build. Our collective experience with mission command has evolved over the past decade of conflict, and mission command has emerged as one of the central tenets underpinning how our Army currently fights.

We evolved out of necessity. To meet and exceed the operational tempo of our enemy required a requisite decentralization of the formal decision-making processes



Dennis Steele

Dennis Steele

Infantry soldiers, backed by Bradley fighting vehicles, practice combat drills. Experience in Iraq and Afghanistan has contributed to the evolution of mission command.

within our fighting units. Commanders recognized that initiative and adaptability, guided by a firm understanding of intent, allowed their units to operate at a much quicker pace.

A Philosophical Shift

As we collectively reflect upon our experiences in both Iraq and Afghanistan, we should consider how these critical lessons will shape how our Army emerges from this past decade of conflict. These lessons should be institutionalized quickly before the hard work and sacrifices of so many are lost. Mission command offers us the framework we need to institutionalize these hard-fought lessons. It is certainly not a new concept, and it is not without challenges, but it does offer the best scenario for how our Army fights in current and future operational environments.

The doctrine of mission command has been a part of our Army for years, and its inherent ideas—adaptability, agility and initiative—are as old as our Army. Mission command is, however, a philosophical shift that emphasizes the centrality of the commander and the decentralization of capability and authority in increasingly complex operational environments. It promotes disciplined initiative and empowers leaders to adjust operations within their commander's intent.

The philosophy of mission command accomplishes what the terms *battle command* and *command and control* could not: the need for commanders to understand that, in today's operational environment, the information coming from the lowest tactical echelon is as important as that coming from the highest strategic echelon. It's a mind-set that allows commanders to push capabilities and responsibilities to the edge, thereby ensuring that our Army can operate at a pace equal to or faster than our enemy. To meet this objective, our Army needs to build upon and continue to grow the adaptive and agile leaders that have emerged from this past decade of conflict.

Disciplined Initiative

An example of mission command in action came with the 3rd Infantry Division's (ID) march to Baghdad in early 2003. Although they certainly operated under a very specific plan of action to achieve the desired end state, more important than the plan was the commander's intent underpinning it. The unit conducted several limited objective attacks, or "thunder runs," into Baghdad. The purpose of these missions was to create confusion within the Iraqi army and to establish bases from which to conduct further attacks into the heart of Baghdad. The V Corps and 3rd ID commanders ensured that their subordinate commanders fully understood that the ultimate purpose was to render the regime irrelevant to the remaining elements of the Iraqi army and to the greater Iraqi society. As those brigades fought their way into Baghdad, they saw an opportunity to maintain the initiative of the attack and continue pressure on the enemy. Instead of remaining in the regime district and slowing their progress, they continued moving downtown where they established a defensive position in the city center. The presence of the U.S. Army in the center of Baghdad struck a crucial blow to the regime's claim of ownership over the city and proved it irrelevant over the rest of the country. Shortly thereafter, the regime collapsed and major fighting ended.

These thunder runs were successful because the corps and division-level commanders established clear intent in their orders and trusted their subordinates' judgment and abilities to exercise disciplined initiative in response to a fluid, complex problem, underwriting the risks that they took. Their focus was not simply on the plan and the staff process that created it but also on their subordinate commanders' execution of that plan and the conditions on the ground that necessitated adjustment. One of the strengths of our Army is our ability to power-down responsibility and decision making to our leaders on the ground, allowing them to exercise disciplined initiative within the commander's intent. Looking back, it is clear that commanders were exercising the mission command principles then that our Army is adopting now.

Agile and Adaptive Leaders

Since those first thunder runs of 2003, our Army has operated in complex and challenging environments that have tested the adaptability and agility of our force. We have

---

LTG David G. Perkins is the commanding general, U.S. Army Combined Arms Center and Fort Leavenworth, Kan. Previously he commanded the 4th Infantry Division and was the U.S. Division-North commander in northern Iraq.

Our thermal management systems improve performance, reliability and mission success.

Around the globe, military and aerospace systems designers have turned to Meggitt to help them meet thermal and power management challenges with compact, efficient vapor cycle systems and liquid cooling sub-systems.

Meggitt has developed cooling solutions for the most challenging flight envelopes and extreme ground conditions.

From low supersonic flight, to high hot wet hover, to desert and arctic ground operations, our thermal management solutions are proven and ready to meet the challenge of the more electronic battlefield.

email: gerry.janicki@meggitt.com
www.meggittdefense.com

MEGGITT
smart engineering for
extreme environments

U.S. Army/SPC Sara Wakai

During Operation New Dawn, a mission that called for agile and adaptive leaders, 1LT Michael Sexton (right), 12th Cavalry Regiment, conducts key leader engagements in Kirkuk Province in May 2011.

operated in areas that require the simultaneous execution of combined arms maneuver in one area and the steadied, patient employment of wide-area security in another. Our leaders have partnered in intergovernmental, interagency and multinational environments, seeking to use the capabilities of those actors who operate outside their direct authority and control.

This was the type of environment we encountered as our Army began Operation New Dawn several years later. While the strategic consequences of the mission were just as important as the thunder runs, the human terrain looked much different. Command responsibility had evolved from one of homogenous units training and deploying together to one marked by modularity. Now, similar to other division-sized areas of operation, representatives from seven of the Army's 10 divisions operated in northern Iraq, working together to achieve a common purpose. This was a challenging endeavor and required a renewed emphasis on building trust and relationships across the organization. Establishing trust was a performance multiplier, enabling organizations to move with incredible speed. Because of the strategic limitations placed upon our Army during that time, mission success also came through collaboration with and support of our interagency, intergovernmental and multinational partners. Developing solid relationships with these actors based upon mutual trust and understanding was crucial to ensuring lasting security and civil capacity in Iraq. These are the complex environments in which our Army will continue to operate in the future, making the institutionalization of mission command an ever more pressing requirement.

Our leaders have had to learn how to become adaptable and, more importantly, how to create adaptable units that can adjust to changes on the ground. The difference between a good battalion commander and a great one was the adaptability and agility of the unit or, to put it in more doctrinal terms, the degree to which those commanders exercised mission command principles. Those units that could easily anticipate and manage transitions were the units that commanders could trust to operate within their intent and at a pace needed to combat an evolving enemy force. They took great care to train adaptability in their units and rewarded agility in their soldiers. Likewise, our Army must take the same care to foster adaptive, agile leaders capable of operating in the rigorous, complex environments of today and tomorrow. Mission command offers our Army the framework on which to build that type of force.

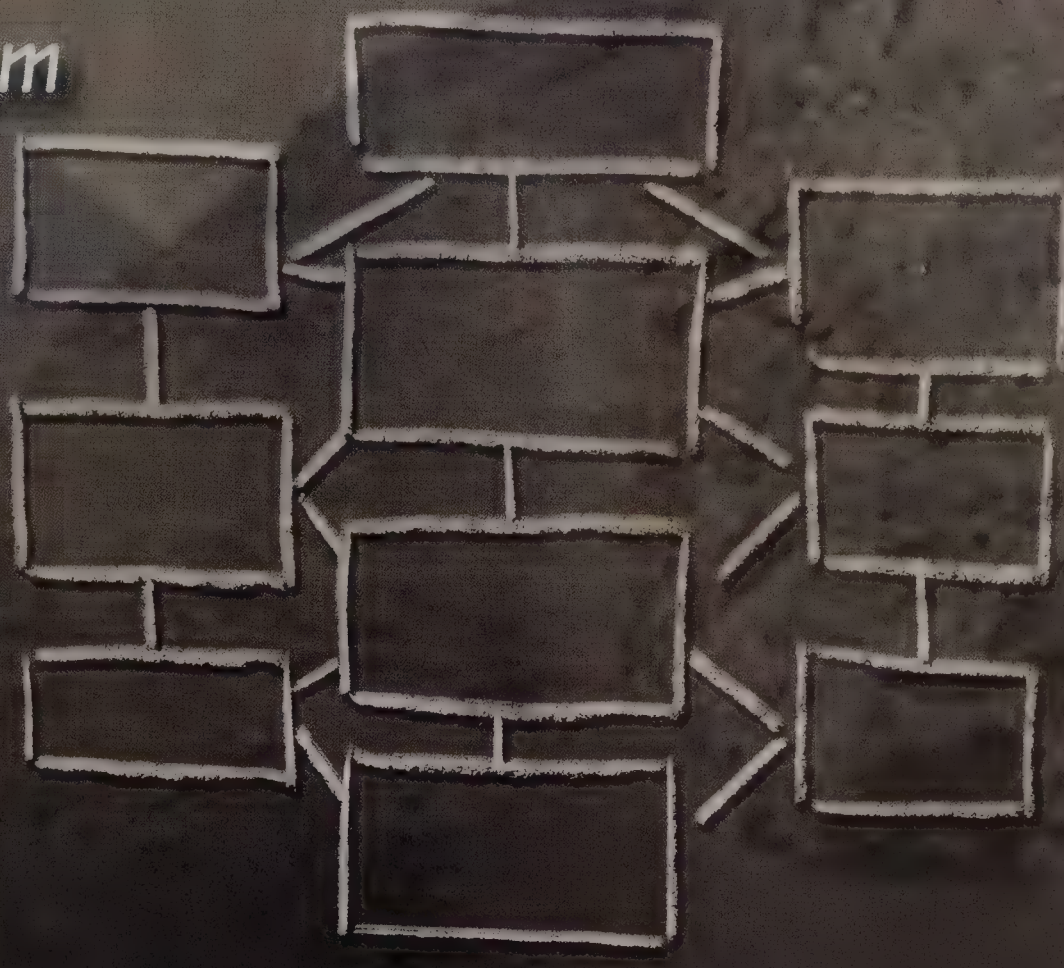
As we continue this important discussion about mission command in our Army, we cannot lose sight of the valuable lessons we've learned over the past decade. These are lessons that have shaped our collective approach to command and should continue to shape how our Army emerges from these conflicts. Over the past two years, our Army has adopted mission command within its doctrine, established the Mission Command Center of Excellence at the Combined Arms Center, Fort Leavenworth, and applied mission command to its leader education curriculum. These were all important and necessary steps to establish the framework for institutionalizing mission command in our Army, but it will be our commanders who will execute these mission command principles each day and who will continue to shape the Army we build for the future.

As we continue to discuss mission command from this point forward, we should reflect on the command approach that our Army has used with such great success in Iraq and Afghanistan. These are the same principles and vision offered by mission command and will be the foundation for how our Army emerges from a decade of conflict. ★

U.S. Army/SPC Nathan Franco

Soldiers assigned to 3rd Armored Cavalry Regiment and Iraqi soldiers stand at parade rest during the transfer of Joint Security Station Husayniya, Karbola Province, Iraq, to the Iraqi government in support of Operation New Dawn.

Cross-Functional Team Staff Structure in the Afghanistan Counterinsurgency

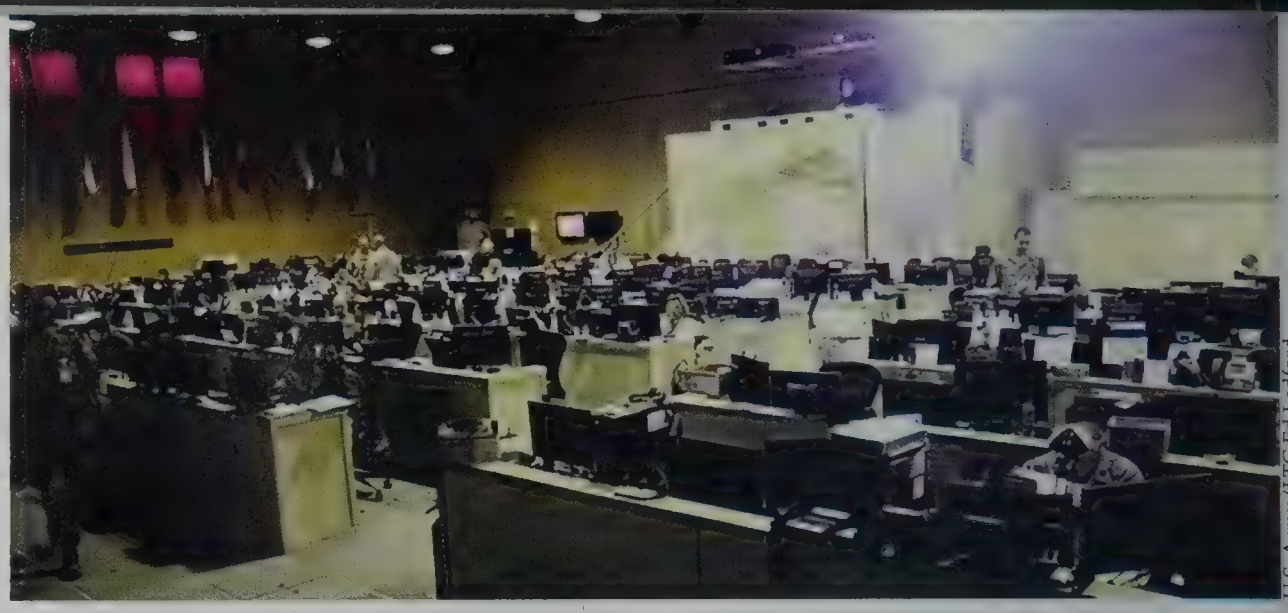


MISSION MC COMMAND

A converted yellow gymnasium on the north side of the Kabul International Airport is headquarters to the International Security Assistance Force Joint Command (IJC). Inside is a labyrinth of hallways with multicolored wires climbing the walls. The rooms are large with rows of long desks, computer screens and scattered papers. There are no privacy dividers. Staff officers sit inches apart conversing, making and refining plans, building briefs, translating ideas, and turning guidance into tasks and intent that become actions on the ground.

The general officers work in similar conditions: There are no private offices with secretaries, aides or military assistants. Like their staff officers, the generals sit in a large room around a horseshoe-shaped series of tables in what is called the Situational Awareness Room. The only difference is that they enjoy a few feet of space to themselves.

By BG Wayne W. Grigsby Jr.,
LTC Mark E. Johnson,
LTC Ed Ledford,
LTC John Callery,
LTC Paul P. Smith Jr.,
COL Michael Rothstein and
MAJ Gail Fisher



U.S. Army/LTC Ed Ledford

At International Security Assistance Force Joint Command Headquarters in Kabul, Afghanistan, cross-functional teams (CFTs) work in "collaborative rooms."

For six to 12 to 15 months—for some, longer—staff officers work 16 to 18 hours a day in these collaborative rooms, directing operations, sharing information, coordinating and planning with their counterparts in the Afghan National Security Forces and international community to develop and refine plans and concepts to synchronize and implement counterinsurgency operations in Afghanistan.

From the Beginning

In June 2009, GEN Stanley McChrystal, the new commander of the International Security Assistance Force (ISAF), initiated a top-down review of the coalition force, its strategy, how it functioned, and what needed to change in order to stem the insurgent advance and seize the initiative. About the same time, a small group of staff officers gathered at the U.S. Forces-Afghanistan (USF-A) headquarters in Kabul to get ready for what promised to be a most-demanding task: Design a highly functional staff structure for a NATO-led multinational operational command headquarters that would command and control coalition forces and partner with Afghan national security forces to regain the initiative in the counterinsurgency and to bring peace and stability to the Afghan people.

In designing this structure, the staff was instructed to throw out "the way we've always done it" thinking. Instead, they would determine—based on an understanding of the insurgency, Afghanistan and counterinsurgency operations—how the staff should be structured to best support the troops on the ground, down at the district level and below, where, in the future commander's view, the coalition would succeed in protecting the Afghan people and helping them beat the insurgency.

"It wasn't a matter of change for change's sake," one of the staff members remembers. "It was the fact that what we have been doing has not been working. So, let's start from scratch and see what we come up with. If we came up with the same thing, then that would have been fine, if that is what we thought would work best," he said. "We had the freedom to design something that would respond to the top-down-guidance and bottom-up-refinement imperative of this counterinsurgency in Afghanistan. Remember, this was not a discreet effort but part of a larger revision of the coalition strategy and a way of fighting the counterinsurgency. Everything was being reexamined. Nothing was sacred."

Agreeing that a traditional functional and combined staff structure would be too slow and cumbersome to act quickly and responsively, the group devised four cross-functional teams (CFTs) to flatten the staffing process, expand information sharing to the greatest extent possible and promote better, more efficient processes, collaboration and communication. The four IJC CFTs were: Current Operations, Future Operations, Future Plans and the Information Dominance Center.

In the IJC CFT model, officers from the various functional staff sections not only sit side by side with operational planners but also work directly for the CFT chiefs, all of whom work for either the deputy chief of staff for joint operations or, as is the case for Future Plans, the deputy chief of staff for plans and policy.

Rather than providing situational awareness to their functional staff leads and coming together for operational planning meetings, as necessary, they would be full-time, permanent members of the CFTs.

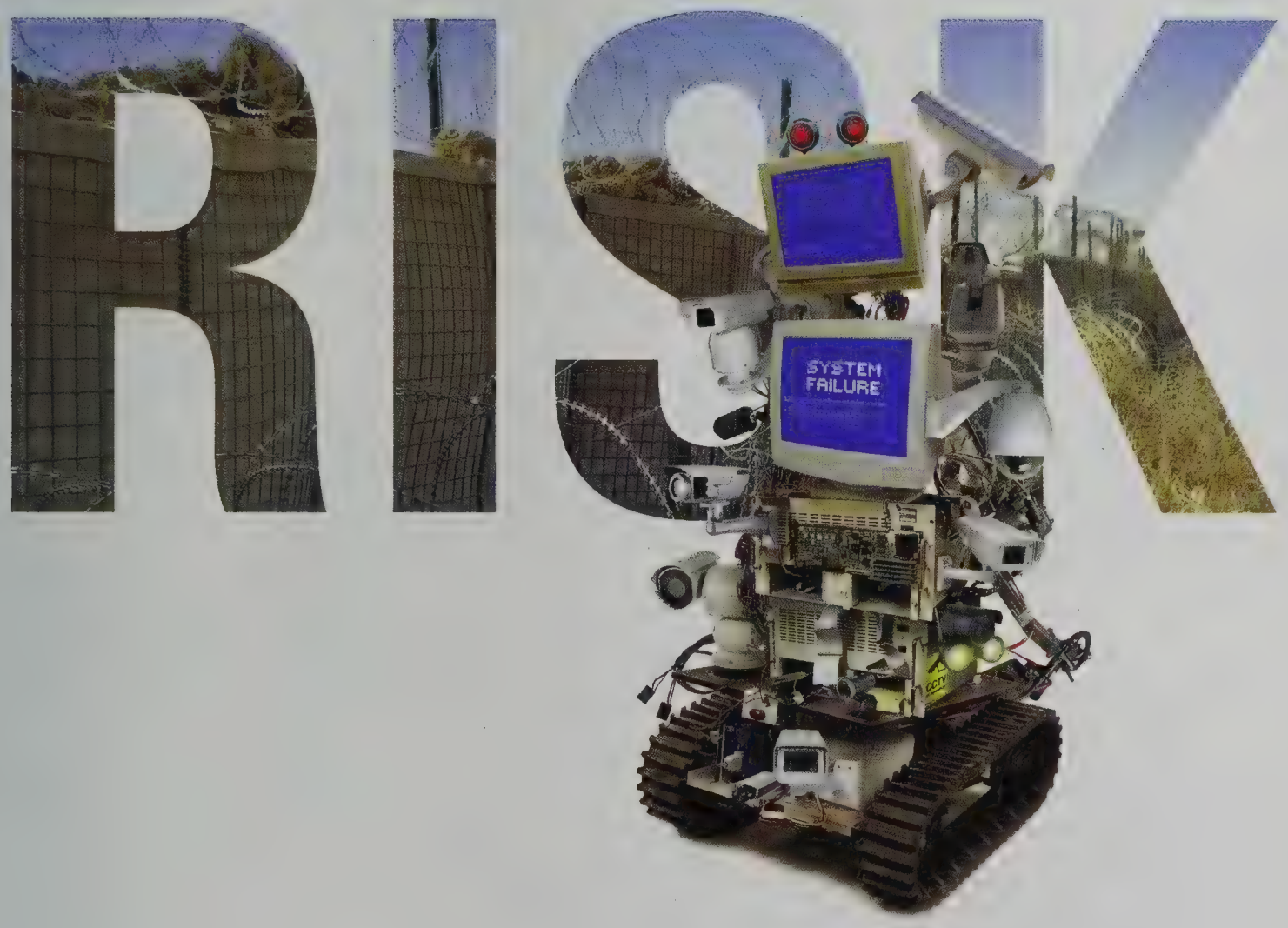
What CFTs Bring to the Fight

The ability of the CFT to communicate and share information internally and with higher and lower echelons more quickly and accurately is an important advantage. Perhaps the biggest advantage of a cross-functional team is the shared situational understanding and institutional knowledge that every member brings to every plan, thus accelerating the planning process while improving the quality of the product. No matter the skill set or function a staff member brings to the group, everyone in the room is directly or indirectly involved in the planning.

At any given time, the CFT can be working on as many as 20 tasks or projects simultaneously, each led by a single planner or team of planners. The rapid pace and synchronized collaboration of a well-performing CFT room is at times analogous to a factory floor with all members of the team knowing exactly what their tasks are and what and

---

The authors held various command positions within the International Security Assistance Force Joint Command (IJC) Future Operations Cross-Functional Team (CFT) when this article was written. ***BG Wayne W. Grigsby Jr.*** *was chief of the IJC Future Operations CFT.* ***LTC Mark E. Johnson*** *was chief of intelligence plans.* ***LTC Ed Ledford*** *was a speechwriter and chief of the IJC Command Operational Engagement Cell.* ***LTC John Callery*** *was the chief of logistical plans.* ***LTC Paul P. Smith Jr.*** *was the deputy chief.* ***COL Michael Rothstein*** *was the chief of the Activity Synchronization Team.* ***MAJ Gail Fisher*** *was the lead stability officer within the Activity Synchronization Team.*



BECAUSE IT'S NOT JUST YOUR JOB, IT'S YOUR LIFE.

Security is a high stakes operation. FLIR's fixed & mobile security solutions remove inherent risks by integrating cutting-edge sensors and adaptive C2 software designed to work together. When lives are at stake, you need integrated solutions you can trust.

FLIR®

www.FLIR.com/gs

© 2012 FLIR Systems, Inc.

U.S. Army/LTC Ed Ledford

Proximity allows each member of the future-operations CFT to communicate and share information internally and with higher and lower echelons rapidly and accurately.

when they need to input to produce the highest quality product. Unlike the factory floor, however, which typically is more linear, the CFT is a system, and staff members must listen and be aware of an enormous amount of information. They must think, evaluate and understand how new data might affect not only the task at hand but also one of any number of other ongoing tasks or projects.

Everyone on the staff needs to understand the operational environment, ideally knowing more about what is happening on the ground and what the host nation and its populace are thinking than does the opposing force and even, at times, the host nation itself. What the CFTs bring to the fight is a staff of functional experts working collaboratively and simultaneously to develop actionable plans in hours or minutes to get inside the insurgents' decision cycle.

We often take for granted the superior quality and training of our soldiers and our technological advantages, forgetting that the most important asset we have is our ability to think and adapt to our environment. We need to be smarter and more intellectually agile than the insurgents. CFTs bring together the breadth of experience of a staff that can quickly and effectively generate the products and plans the commander needs to make decisions.

Challenges

A CFT is only as good as its people and its leader. Perhaps the greatest challenge lies in building effective teams from diverse backgrounds in a coalition environment and then getting everyone moving and thinking in the same direction. In the IJC, the CFTs are composed of multinational coalition plans officers from Australia, the United Kingdom, Estonia, the Netherlands, Bulgaria, Poland, Turkey, Denmark, Germany, France, Italy, Spain and others. The majority are field-grade officers. Many speak the official NATO language, English, as a second language but often better than native English speakers. Their breadth of knowledge and experiences are invaluable.

With each CFT led by a colonel or brigadier general, a strong chief of staff (COS) is critical. As with traditional functional and combined staffs, there is a tendency for senior field-grade officers, even in CFTs, to look internally and view the world from the perspective of what tasks or projects *they* need to accomplish within a specified time rather than synchronizing their efforts. To avoid this pitfall, the COS deconflicts and manages all tasks according to priority. It would be fairly easy for CFTs to duplicate efforts, especially on those tasks that do not neatly fall into general planning time horizons that differentiate between current and future operations and future plans. A strong, proactive chief preserves the integrity and synchronizes the planning of efforts.

Initially, one of the most significant challenges with the implementation of CFTs was getting staff sections to buy into the concept. The CFT, as the centerpiece of a command's staff structure, can be an uncomfortable shift from our formal education. No longer do we sit in offices and come together to plan and then return to our offices to write our staff estimates and operations orders. Now, junior and senior staff officers from a range of backgrounds and specialties sit in the same room and look, speak, cooperate and exchange information with each other on a continual basis. To many who grew up longing for that private office and space in which to think, the CFT concept is unsettling and disruptive. It takes time to adapt.

A Model for the Future

The decision to combine all functional expertise into CFTs—1,300 people from 34 countries—to streamline communication and expedite the military decision-making process was as innovative as it was a natural evolution. The handful of staff officers who walked into the gymnasium to design the floor plan of the new IJC headquarters did not have the luxury of time to cobble together a staff and develop the institutional understanding and situational awareness necessary to conduct military-civilian operations in a counterinsurgency environment.

The CFT concept is just one of many ways to build a corps-level headquarters staff—subordinate units, civilian counterparts, national and international nongovernmental organizations—with the mental and physical agility to learn from its Afghan partners and from each other.

The CFT concept can serve as a model for future commands and staffs that need to quickly flatten communication, increase situational awareness and allow the commander to make quick, informed decisions to get inside the insurgents' decision cycle. ★

Special Operations/Conventional Forces

INTERDEPENDENCE:

A Critical Role in 'Prevent, Shape, Win'

MISSION MC COMMAND

By MG Bennet S. Sacolick
and
BG Wayne W. Grigsby Jr.

As the Army reflects on the lessons of the past 10 years, we recognize that lethal and nonlethal capabilities of conventional force must work among diverse cultures to fight and win population-centric conflicts. While these capabilities "reside" in special operations forces (SOF), the lack of comprehensive special operations and conventional force (CF) interdependence impedes the Army's ability to operationally leverage the unique cultural capabilities of special operations and inculcate them across the conventional force.

The Army's "campaign of learning," initiated to guide institutional change, has identified two important challenges to mitigate these gaps: improve Army capabilities to build foreign partner capacity and synchronize special operations and conventional force capabilities. To meet these challenges, the Army must use the generating force as an agent of change to institutionalize lessons learned, update the doctrinal framework with the linked concepts of the human domain and a 7th warfighting function, and expand the interdependence of SOF and CF. The Army must operationalize and institutionalize this change in order to adapt and continue to dominate unified land operations in the future.

The incorporation of the human domain with the joint domains of air, land, maritime, space and cyberspace increases understanding of the operational environment and mitigates seams created by the physical organization of operational areas. The operational environment is the composite of the conditions, circumstances and influences that affect the decisions and capabilities of the commander in mission command. The addition of the human domain extends understanding beyond the physical environment and includes the influences that affect human behavior and are critical to success in population-centric conflicts. Operational areas designated by joint force commanders often have physical dimensions with geographical boundaries that help commanders and staffs coordinate, integrate and deconflict joint operations. The human domain, however, is not limited by physical boundaries; it interacts with and supports dominance in each of the other domains.

Human Domain

The human domain is the totality of the physical, cultural and social environments that influence human behavior to the extent that success of any military operation or campaign depends on the application of unique capabilities that are designed to fight and win population-centric conflicts. It is a critical and complementary concept to the recognized domains of land, air, maritime, space and cyberspace. Special operations-critical capabilities and associated doctrine prepare our soldiers to work among diverse populations in a culturally attuned manner. The expansion of these capabilities in the Army will better enable the force to win population-centric conflicts. The human domain focuses the Army's efforts to address the human factors external to our own forces in a manner similar to the Army's internal focus on the human dimension.

The concept of the human domain is the cognitive foundation of the 7th warfighting function's lethal and nonlethal capabilities to assess, shape, deter and influence foreign security environments. When synchronized by mission command, the employment of the new warfighting function in concert with the other warfighting functions facilitates the Army's capability to effectively operate within the human domain. All of our centers of excellence need to reevaluate how the human domain affects their warfighting functions and then incorporate any effects from this domain into the updated functional concepts. By making these concepts institutional within Army doctrine, we're providing a framework to support and employ the complementary capabilities of special operations and conventional forces.

*MG **Bennet S. Sacolick** is the Commander of the U.S. Army John F. Kennedy Special Warfare Center and School, the Army's Special Operations Center of Excellence, Fort Bragg, N.C. MG Sacolick has commanded special operations forces and has participated in combat operations in El Salvador, Peru and Colombia and in Operations Just Cause, Desert Storm, Task Force Ranger, Joint Endeavor, Enduring Freedom and Iraqi Freedom. **BG Wayne W. Grigsby Jr.** is the director of the Mission Command Center of Excellence at Fort Leavenworth, Kan. Previous assignments include director of the School for Advanced Military Studies; chief of International Security Assistance Force Joint Command's Future Operations Cross-Functional Team during the Afghanistan surge; and commander of the 3rd Brigade Combat Team, 3rd Infantry Division, during the Iraq surge.*

Current SOF-CF Interdependence

While special operations and conventional forces have made great strides in integrating their various capabilities, these efforts alone will not suffice for the future. In Iraq and Afghanistan, operational necessity drove battlefield synchronization and integration of the joint force founded on personal relationships. Integration that relies on personal relationships forged on the battlefield, however, is transient unless made operational and institutional and instilled in our forces from the very beginning of professional military education and throughout all planning and training. The closure of the Iraq theater and the drawdown in Afghanistan will reduce the impetus behind current interdependence initiatives and limit opportunities for shared operational experience. Unless we start now to codify and expand interdependence in the force, we risk losing momentum and reverting to pre-9/11 mind-sets.

The Challenge of Interdependence

To operationalize and institutionalize change in our Army, we must first fix doctrine. The scope and scale of challenges anticipated in the future security environment demand the institutionalization of interdependence. The Army's capacity for such a mutually reliant and operationally effective relationship originates in the generating force, which consists of Army organizations that sustain the operational force. Doctrinal, organizational, preparatory and educational changes in the Army's generating force will inform all levels of professional military education and drive changes in the operational force, whose primary mission is to conduct unified land operations. The Army's challenge is to seamlessly integrate lethal and nonlethal special operations and conventional force capabilities while maintaining the unique cultures and capabilities that support the vision of the Chief of Staff of the Army (CSA) to "prevent, shape, win" and enable success of the joint force on the battlefield.

The Generating Force as an Agent of Change

The generating force organizes and develops the Army's capacity for interdependence and drives integration of operational forces and synchronization of effects on the battlefield. Within the generating force, the Army must establish and reinforce the systems and processes that expand interdependence between conventional and special operations forces. Institutionalized changes in the generating force drive change in the operational force, where units train to-

Some of the Biggest Reasons to Stay On Post Are Also the Smallest.

At IHG Army Hotels, we believe military personnel should be as close to their families–and their jobs–as possible. That's why our hotels are located right on post. Enjoy comfortable rooms, complimentary breakfast, concierge service, and free on-post shuttles. You can even bring your pet along, since they're part of the family, too.* Discover IHG Army Hotels for yourself. Staying on post has never been this comfortable.

To learn more about the reasons mentioned here, go to **IHGArmy.com**.

IHG ARMY HOTELS

The right place to stay is right on post.

IHGArmyHotels.com
877.711.TEAM (8326)

IHG Lend Lease 2012 InterContinental Hotels Group. All rights reserved. IHG Army Hotels are independently owned by Rest Easy, LLC, an affiliate of Lend Lease (US) Public Partnerships LLC, and operated by an affiliate of IHG. * A small non-refundable fee may apply.

gether to develop the capability for mutual support and meet the challenges of joint integration and synchronization. Operational integration enables synchronized operations and a seamless front on the battlefield. One example of this interdependence is the partnership among the special operations, intelligence and mission command centers of excellence to develop a concept for unified exploitation that will integrate exploitation activities in Afghanistan.

Institutionalizing Lessons Learned

The foundation of future interdependence begins with the institutionalization of observations, insights and lessons collected by both special operations and conventional force organizations, including developing a shared understanding of special operations and conventional force capabilities, integrating mission planning, and aggressively exchanging liaison officers. Our history, however, shows that these lessons quickly fade unless reinforced in doctrine, organizations, training, leadership and education.

As the Army codifies lessons learned in the U.S. Central Command (CENTCOM) area of responsibility (AOR), we must also expect new challenges as our nation shifts focus to the Pacific Rim. Initiatives that integrate and synchronize Army capabilities with those of special operations—village stability operations in Afghanistan, for instance—serve as a guide for enhanced interdependence in the joint team and among our interagency partners. These lessons also spur the development of future initiatives that enable the generating and operational force to synchronize unified action on the battlefield.

Updating the Warfighting Function Framework

The Army's warfighting function construct must be updated to reflect the requirements of the future operational environment to assess, shape, deter and influence foreign security environments. Reorganizing these lethal and nonlethal activities under the 7th warfighting function will institutionalize the capabilities and skills necessary to work with host nations, regional partners and indigenous populations.

This integrated effort by the Special Operations Center of Excellence (SO CoE) with the other centers of excellence and the Army Capabilities Integration Center (ARCIC) is the first step in expanding special operations and conventional force interdependence in the institutional Army. The SO CoE will write the functional concept for the new warfighting function, including important portions of the building partner capacity concept and incorporating interdependence among the other functional concepts.

ARCIC will lead the integration into a coherent, synergistic campaign of learning reflected in the Army capstone and operating concepts. Once these changes are codified in doctrine, they will inform all levels of professional military education and training. As the nation's force of decisive action, we must maintain our momentum and adapt to the realities that challenge the status quo to continue to dominate in unified land operations.

Driving Change in the Operational Force

In the operational force, special operations and conventional force units must train together to institutionalize mutual support in joint operations. Generating force interdependence in doctrine, organization, training, leadership and education provides a common framework that enables operational integration. Conventional force formations, organized by warfighting function, will change to account for new capabilities developed by the generating force. The addition of a new functional cell that governs and synchronizes conventional and special operations forces' capabilities to assess, shape, deter and influence foreign security environments will draw SOF and CF operational frameworks closer and thus provide a means to integrate their capabilities for the joint force commander.

Operational integration, enabled by doctrinal and organizational interdependence, is the arrangement of military forces and actions to create a force that conducts operations as a whole. Integrated training and operations improve the Army's capacity for operational integration. At the unit level, integrated training is conducted through home station training and rotations at the combat training centers that include conventional and special operations forces.

Headquarters integration is developed in many venues, including geographic combatant command exercises and mutually supported component exercises. Integration in operations is developed through clearly defined command and support relationships with extensive liaison exchange executed across the range of military operations, from security cooperation initiatives to major combat operations.

Outcomes of Interdependence

The ultimate goal of special operations and conventional forces interdependence is to increase operational effectiveness by enabling the joint force to present a seamless front to our enemies and a united face to our friends and partners. Clearly defined and routinely practiced command and support relationships with extensive exchange of liaisons enable battlefield synchronization, built on the foundation of generating force interdependence and operational integration. Commanders must become more comfortable utilizing supported/supporting relationships to create unity of effort for the joint force commander. Enhanced interdependence, driven by changes in the generating force, enables a joint force that is more capable of preventing and deterring conflict, shaping the environment, prevailing in war and succeeding in a wide range of contingencies.

To continue the development of special operations and conventional force interdependence, we must use the generating force to drive change through codified lessons learned and updated doctrinal frameworks. The Army must operationalize and institutionalize change in order to adapt and continue to dominate unified land operations in the future. Our joint challenge is to seamlessly integrate the unique cultures and capabilities of special operations and conventional forces to support the CSA's vision of "prevent, shape, win" and enable success of the joint force on the battlefield. ★

CEMA: A Key to Success in Unified Land Operations

MISSION COMMAND

The Army has recently codified the concept of cyber-electromagnetic activities (CEMA) within its doctrine. At its heart, CEMA is designed to prepare the Army to address the increasing importance that both cyberspace and the electromagnetic spectrum will play in the success of unified land operations.

According to ADP 3-0 Unified Land Operations, CEMA involves "activities leveraged to seize, retain and exploit an advantage over adversaries and enemies in both cyberspace and the electromagnetic spectrum, while simultaneously denying and degrading adversary and enemy use of the same and protecting the mission command system." It is implemented via synchronization and integration of three lines of effort: cyberspace operations, electronic warfare (EW) and electromagnetic spectrum operations (EMSO).

By BG Wayne W. Grigsby Jr.,
COL J. Garrett Howard,
Tony McNeill
and
LTC Gregg Buehler,
U.S. Army retired

iStockphoto

Longbow radar (in a close up on an Apache attack helicopter) is a millimeter-wave fire control radar that offers exceptional targeting capability. Visible just behind the main rotor assembly, an infrared jammer improves survivability against heat-seeking missiles.

Cyberspace operations employ capabilities to achieve objectives in or through cyberspace. The three main components of cyberspace operations are offensive cyber operations (attack, exploit), defensive cyber operations (defend) and DoD global information grid operations (build, operate and maintain).

EW is any military action involving the use of electromagnetic and directed energy to control the electromagnetic spectrum (EMS) or to attack the enemy. Electronic warfare consists of three divisions: electronic attack, electronic protection and electronic warfare support.

EMSO consists of planning, operating and coordinating the use of the electromagnetic spectrum through operational, engineering, administrative and policy implementation procedures to enable wireless electronic systems to function in the intended environment without causing or suffering unacceptable "frequency fratricide."

When stressed by the commander and integrated by the staff, CEMA can play a critical role in the successful execution of decisive action. Analysis from recent history and emerging trends within the operational environment (OE) support this assertion. The world in which U.S. forces operate is increasingly wireless and computer network-based. Rapidly evolving information technologies are expanding the speed, capacity, agility, efficiency and usefulness of modern networks. The proliferation of these systems is changing the way humans interact with each other and their environment, including military operations. This creates conditions that will make U.S. forces increasingly dependent on these technologies and require soldiers to counter technology-empowered and sophisticated adversaries who can utilize commercial industry and the network as their primary combat developers. This broad and rapidly changing OE will present a plethora of potential threats and opportunities that are primarily limited by our own—and our opponents'—imagination, causing the Army to operate within a cyberspace domain and EMS that are increasingly congested and contested.

In addition, it's important to recognize the convergence of cyber and EMS capabilities. Commercial and military systems are increasingly reliant on both as networks and telecommunication infrastructures expand their use of wireless means. This is particularly important for collaborative systems that require connectivity to operate effectively. The synergistic effect of these networks is a significant reason why EW, EMSO and cyber operations must be viewed as interrelated and interdependent. Though organizations are already executing these tasks to some degree throughout the Army, the inherent interrelationship among these three components demands that they be closely synchronized to optimize

---

BG Wayne W. Grigsby Jr. *is the director of the Mission Command Center of Excellence at Fort Leavenworth, Kan. Previous assignments include director of the School for Advanced Military Studies; chief of International Security Assistance Force Joint Command's Future Operations Cross-Functional Team during the Afghanistan surge; and commander of the 3rd Brigade Combat Team, 3rd Infantry Division, during the Iraq surge.* ***COL J. Garrett Howard*** *is director of the U.S. Army Electronic Warfare Proponent Office at Fort Leavenworth. Prior assignments include chief intelligence planner in Iraq on the Multi-National Force-Iraq staff. He has commanded military intelligence units at the company, detachment and battalion levels.* ***Tony McNeill*** *is deputy director of the Electronic Warfare Proponent Office at Fort Leavenworth. He is the lead author of Field Manual (FM) 3-36* Electronic Warfare in Operations. *A former Marine Corps lieutenant colonel, he last served as deputy director and chief instructor within the Marine Corps Element at the Army Command and General Staff College.* ***LTC Gregg Buehler****, USA Ret., is doctrine and organizations section chief within the Electronic Warfare Proponent Office at Fort Leavenworth. He is the lead author of FM 3-38* Cyber-Electromagnetic Operations *and recently completed the revision of FM 3-36. Previously he served as the chief of organizations development within the Proponent Office and the lead for the Force Design Update for Electronic Warfare.*

PROTECT TROOPS FROM HARM.

With the new Bobcat® Loader Radio Remote Control System, troops can operate Bobcat loaders without being in the cab. The frequency hopping spread spectrum technology allows troops to control Bobcat loaders within line of sight from up to 500 meters away. The system can be changed from traditional in-cab operation to remote operation in a matter of minutes. The tough, dependable Bobcat loaders provide another solution to adapt to changing threats, do more complicated jobs with fewer soldiers and protect the safety of our troops. Bobcat is delivering on the military's future need for remotely operated vehicles today. Now available through DLA and GSA contracts.

www.bobcat.com/remote **1.877.505.3580**

Bobcat® and the Bobcat logo are registered trademarks of Bobcat Company in the United States and various other countries.
©2012 Bobcat Company. All Rights Reserved. | 834S-6

Bobcat

One Tough Animal

iStockphoto

their potential impact on the execution of decisive action.

Informed by these observations, the Army built the CEMA construct on several important assessments. Commanders play a central and critical role in CEMA: They must ensure that cyberspace and the EMS are viewed as important elements within their analysis of the OE, and they must recognize that it is possible to gain an operational advantage over an adversary within these areas and that such an advantage can be decisive in the conduct of operations. This can occur at all levels of warfare (tactical, operational and strategic) and organizational echelons. Conversely, to allow an adversary to gain such an advantage or to lose the freedom of movement within cyberspace and the EMS will set one at a significant disadvantage.

In turn, this will require commanders to reexamine their view of what constitutes combined arms. This does not mean that one forgoes or diminishes the importance of traditional weapons systems (lethality still matters) but instead that one recognizes that commanders should consider cyber, EW and EMSO capabilities as part of the combined arms construct as the equal of their more traditional counterparts. Implicit in this point is that commanders must be able to address cyber, EW and EMSO via the same operations process and integrating functions as any other available resource.

The requirement for full integration of these capabilities, the dependency of mission command systems on the EMS and cyberspace, and the commander's critical role in using these capabilities resulted in the Army's decision to conduct cyber-electromagnetic activities within the mission command warfighting function.

To fully empower commanders with the tools they need to execute decisive action, the Army is aggressively pursuing ways to bring more cyber, EW and EMSO capabilities down to the tactical edge. Given the recent embrace of the CEMA construct, this also includes seeking ways to provide commanders (brigade combat team and above) with an organic means to integrate these activities into the operations process.

To some degree, this integration is already occurring. Soon-to-be-published revisions to Field Manual 3-36 *Electronic Warfare in Operations* will task the commander's EW element to expand and use the EW working group to facilitate CEMA integration. This is intended only as a bridge, however, until the Army develops a more appropriate means to achieve this. Army Cyber Command and the Mission Command Center of Excellence are co-leads in the Army's effort to determine how best to accomplish CEMA integration for the long term.

Current plans envision CEMA integrated within the operations process via the Cyber-Electromagnetic Working Group (CEMWG) and integration efforts led by a cyber-electromagnetic (CEM) staff element. The role of the CEMWG will be to integrate and synchronize cyberspace operations, EW and EMSO to maintain freedom of action while denying our adversaries the same, ultimately to achieve the commander's intent and operational objectives.

The CEMA element, the composition of which is to be determined, will focus on two important functions. First, it will seek to integrate and synchronize cyber-electromagnetic capabilities and activities to achieve desired conditions in the cyberspace domain and across the EMS. This will involve unifying the offensive and defensive aspects of cyber-electromagnetic activities and orienting them on the commander's stated objectives. To this end, the CEM element serves as the source of cyber-electromagnetic situational awareness and continually assesses progress toward desired conditions. The CEMA element integrates all appropriate capabilities to achieve these desired ends. Second, the element will integrate cyber-electromagnetic activities as part of combined arms.

Both functions will be accomplished within the staff's three integrating cells: current operations, future operations and plans. The CEM element will coordinate the critical components of cyber-electromagnetic activities across all the warfighting functions and staff elements (G/S-2, G/S-3, G/S-6, and so on) both vertically and horizontally. This includes integration with external staffs, organizations and coalition partners. Given the very dynamic nature of cyber-electromagnetic activities, the CEM element will likely require a presence in the current operations cell and may need colocated representatives from the G/S-2, G/S-3 and G/S-6 (and potentially others) to achieve real-time awareness, direct dynamic actions and responses to unfolding conditions.

Determining how to address the challenges and opportunities that cyberspace and the EMS present our forces will remain an evolving process. Time, technology, available resources and a plethora of other factors will influence how the Army develops its solutions. What is certain is that the need to operate within this part of the commander's OE will remain and that to gain and maintain an advantage in cyberspace and the EMS will be vital to successful unified land operations. ★

TOXIC LEADERSHIP

What Are We Talking About?

By LTG Walter F. Ulmer Jr.
U.S. Army retired

The American Army is, of necessity, a hierarchical bureaucracy. Disciplined response to authority remains a bedrock value. Ten years of complex operations conducted typically with notable professionalism by a true volunteer force must be unique in history. And that noteworthy effort followed decades of erratic funding and potentially traumatic alterations of structure.

Our Army is also a remarkably introspective institution. Studies of leadership and command climates abound. Since "good leadership" is commonplace, headlines about "toxic leaders" should (and do) draw attention. Recent military journals provided sad details of conspicuous relief of Army and Navy commanders. The reason for concern about any toxic leaders, particularly in our senior ranks, is apparent: Talented people in the 21st century expect to work in healthy climates, where strong bonds of

mutual trust facilitate mission accomplishment and support long-term institutional strength. Toxic leaders corrupt healthy climates. Indeed, their very presence, even in small numbers, undermines confidence in the institution's commitment to high standards of leadership.

Defining 'Toxic Leader'

Defining *toxic leader* is the first priority before addressing numbers, impact, cause and solution. Webster's defines *toxic* as *poisonous*, not far from *destructive* or *harmful*. Naturally, the definition varies with the culture: Some routine styles of command aboard the HMS *Bounty* would not be tolerated today. Soldiers today have suitably high expectations about the kind of leader behavior we have identified as doctrine.

In response to a Secretary of the Army tasking in 2003, U.S. Army War College faculty and students stated that toxic leaders "are focused on visible short-term mission accomplishment ... provide superiors with impressive, articulate presentations and enthusiastic responses to missions ... [but] are unconcerned about, or oblivious to, staff or troop morale and/or climate ... [and] are seen by the majority of subordinates as arrogant, self-serving, inflexible, and petty." This definition reminds us that not all elements of a toxic personality are independently destructive. We prize "articulate presentations and enthusiastic responses to missions." The phrase in the 2003 definition, "are seen by the majority of subordinates," is significant. In determining leader toxicity, group consensus is powerful.

The U.S. Army War College study, "Leadership Lessons at Division Command Level-2010: A Review of Division Commander Leader Behaviors and Organizational Climates in Selected Army Divisions after Nine Years of War," surveyed and interviewed 183 officers from four divisions just returning from deployment in Operation Iraqi Freedom or Operation Enduring Freedom. The study summarized officer views of toxic leaders as "self-serving, arrogant, volatile, and opinionated to the point of being organizationally dysfunctional ... very persuasive, responsive, and accommodating to their seniors." In those interviews, the report continued, "it seemed clear that officers were not describing the 'tough but fair,' or even the 'oversupervisor,' or the 'not really good with people,' or even the 'rarely takes tactical initiative.'" These officers' perceptions make a discernible, important distinction between *tough* and *toxic*. An assessment of a leader as inferior or even unsatisfactory based on decision-making inadequacies, clumsy interpersonal skills or lack of drive did not automatically label him as toxic. It is also possible to "make tough, sound decisions on time," "see the big picture [and] provide context and perspective," and "get out of the headquarters and visit the troops"—the top behaviors of a highly regarded senior leader as reported in a 2004 division commander study—and still be conspicuously toxic as judged by a majority of subordinates. In other words, while all toxic officers are ultimately poor leaders, not all poor leaders are toxic. The forthcoming version of Army Doctrine Publication 6-22, *Army Leadership* notes, "Toxic leadership is a combination of self-centered attitudes, motivations and behaviors that have adverse effects on subordinates, the organization and mission performance." A recent study on ethical behavior by the Army Center of Excellence for the Professional Military Ethic, "ACPME Technical Report 2010-01: MNF-I Excellence in Character and Ethical Leadership (EXCEL) Study," stated, "The Army should develop leaders who understand the line between being firm ... and being abusive; and identify and separate those found to be abusive." *Identify* and *separate* are the important words.

A proposed definition: Toxic leaders are individuals whose behavior appears driven by self-centered careerism at the expense of their subordinates and unit, and whose style is characterized by abusive and dictatorial behavior that promotes an unhealthy organizational climate. Other observations about toxic leaders from surveys, interviews and literature—most derived from research and discussions about senior leaders or managers—are:

- They rarely take blame or share glory.
- They are not toxic all the time, or to all people.
- They are rarely if ever toxic when in the company of "the boss."
- They sometimes have good ideas and accomplish good things.
- They can be charming when the occasion fits.
- They are frequently described as extremely bright and hard-working.
- They often have a coterie of devoted "fans" who keep appearing on their staffs.
- Most have been seen as toxic by subordinates since early in their career.
- Their boss either does not know or pretends not to know, and almost never records, their abuse of subordinates.

Numbers of Toxic Leaders

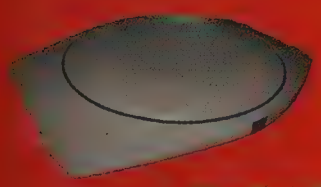
Because there is no standard definition of *toxic*, because perceptions about a superior's behavior are subjective, because our Army culture puts loyalty to the leader and ability to absorb hardship of all kinds high on the attribute list, and because a degree of harshness has characterized some highly regarded officers, estimates of the numbers of toxic leaders are just that—estimates. The data become less subjective, however, when we can assess also the impact of toxic leadership on the climate of the organization.

***LTG Walter F. Ulmer Jr.**, USA Ret., commanded the 3rd Armored Division and III Corps, was director of human resources development at HQDA, and served as Commandant of Cadets at USMA. He served as president and CEO of the Center for Creative Leadership and is co-author of several studies of officer leadership including the U.S. Army War College 1970 "Study on Military Professionalism;" the 2000 CSIS study, "American Military Culture in the Twenty-first Century;"and the 2004 and 2010 studies, "Leadership Lessons at Division Command Level."*

EXELIS

THE POWER OF INGENUITY

Remote mission.
Proven broadband.
Cost-effective solution.



In the world of satellite communications, GNOMAD stands apart. Combat-proven by the U.S. Army in Northern Iraq and Kuwait, GNOMAD equips forces with reliable broadband communications by extending Wi-Fi and 3G/4G cellular networks into harsh environments.

Modular by design, GNOMAD delivers affordable networking beyond line-of-sight while on the move. To learn more about GNOMAD's innovative capabilities, visit **www.exelisinc.com/gnomad-dom**.

www.exelisinc.com

Exelis and "The Power of Ingenuity" are trademarks of Exelis Inc. ITT is a trademark of ITT Manufacturing Enterprises, LLC, and is used under license. Copyright © 2012 Exelis Inc. All rights reserved. Photo courtesy of the U.S. Army and Sgt. Ken Scar.

The best current reference on the toxic leader issue is the Center for Army Leadership (CAL) "Technical Report 2011-3," which garnered some national press recently. Estimates of toxic leaders in that study, which assessed both noncommissioned and commissioned officers, ranged into the 20 percent level. That very high number might have resulted in part from a broad interpretation by respondents of a toxic leader, although study members took efforts to ensure that toxicity was differentiated from simply poor leadership. A recent survey at the U.S. Army Command and General Staff College, however, found a figure of nearly 18 percent. Whatever the numbers are today, the sense of the officer corps is that there are undoubtedly toxic leaders among us with the possibility that their numbers are decreasing somewhat from some undetermined past date.

One slice of information on percentages of perceived toxic leaders among colonels and general officers—the level constituting the greatest potential danger to operational effectiveness and retention of high-quality people—comes from informal surveys of some students at the Command and General Staff College (CGSC) and the Army War College over a period of 15 years. (See the chart on the next page.) These data describing colonels and generals are derived from inputs from successful student officers who had been treated well by the institution.

The percentages of senior leaders perceived by their subordinates to be outstanding/transformational (30–50 percent) would be viewed as remarkably high in any organization. Those figures are a tribute to persistent Army efforts to develop and select good leaders. The "toxic" numbers, however, are also remarkable. They deserve an institutional response. A mission command culture could be strangled by this percentage of toxic senior leaders in the force. A very good soldier and scientist, LTC Larry Ingraham, now deceased, commented on the dramatic differences among subordinate reputations of senior officers, saying that the personnel system that cannot distinguish between the revered and the despised must have a fundamental flaw.

Why Toxic Leaders Survive in Our Culture

Military environments are fertile ground for both growing outstanding leaders and tolerating tyrants. As a culture we value cooperation, loyalty and respect for authority. We honor a "can-do" attitude. We build unit pride and are uncomfortable with malcontents. We rightly prize mission accomplishment. As long as the mission is relatively short-term, before a destructive climate raises its ugly head, the toxic can-do personality can prosper. Subordinates are reluctant to identify their boss as toxic. They feel a loyalty and do not want to embarrass their unit. They want to "survive" themselves and not be written off as troublemakers. In addition, it takes a very strong and perceptive boss to identify a subordinate as toxic and take action. Most actions to relieve a toxic leader were set in motion only after a public spectacle forced an investigation that uncovered toxic leadership as a root cause.

Considerable work has been done in the social, behavioral and cognitive sciences on toxic or destructive leaders. An article in the June 2007 issue of *The Leadership Quarterly*, "The Toxic Triangle: Destructive Leaders, Susceptible Followers, and Conducive Environments," provides an excellent summary, stating, "Three components of charisma apply to destructive leaders: vision, self-presentational skills, and personal energy." It is interesting to see how closely these descriptions apply to current Army officers. The referenced paper explains the role of the narcissistic personality whose "sense of entitlement often leads to self-serving abuses of power." The fact that toxic behavior is typically linked to a substantially compromised personality does not augur well for on-the-job remediation or development as an institutional solution.

Although alerted for years to the issue, as an institution we have been reluctant to confront it directly. We have put faith in incremental adjustments to education, training and development systems. There has been little urgency to act systematically. The rarely conspicuous cases were handled individually with apparently rare exploration of underlying cultural issues. This was partly because our institution has performed well overall, because of our often "if it ain't broke don't fix it" mentality, and because the senior leader time and energy needed to fix complex internal systems were understandably captured by immediate crises that demanded their attention. Our institution is by no means broken, but it deserves some refurbishing.

There are lingering doubts within the Army about implementing remedial programs that would give subordinates any formal voice in the personnel management process. The predominant fear is of an eventual weakening of the chain of command. There are understandable suspicions also that many reports of toxic leadership are from dissatisfied subordinates who failed to meet the legitimate expectations of demanding bosses. That contention is not supported by recent studies but could provide a rationale for avoiding the unpleasant business of digging into complex personnel systems. The toxic leader phenomenon is a slowly growing organizational cancer that can be tolerated by resilient people for a long time before causing sharp institutional pain.

Solution Concepts

We are correctly cautious in adopting practices that have even a remote possibility of compromising command authority. Even admitting there are toxic leaders in our midst is problematic for a few officers. For the vast majority of officers a pretension that there are none seems patently dishonest. In any case, staying on the current path has no rational hope for solving the problem. Meanwhile, tolerance for toxic leaders among current members of the force is conspicuously low. Perceived institutional nonchalance about the situation is a serious contradiction of espoused Army values. The desired mission command culture depends heavily on an environment of mutual trust that only high-quality leaders can produce.

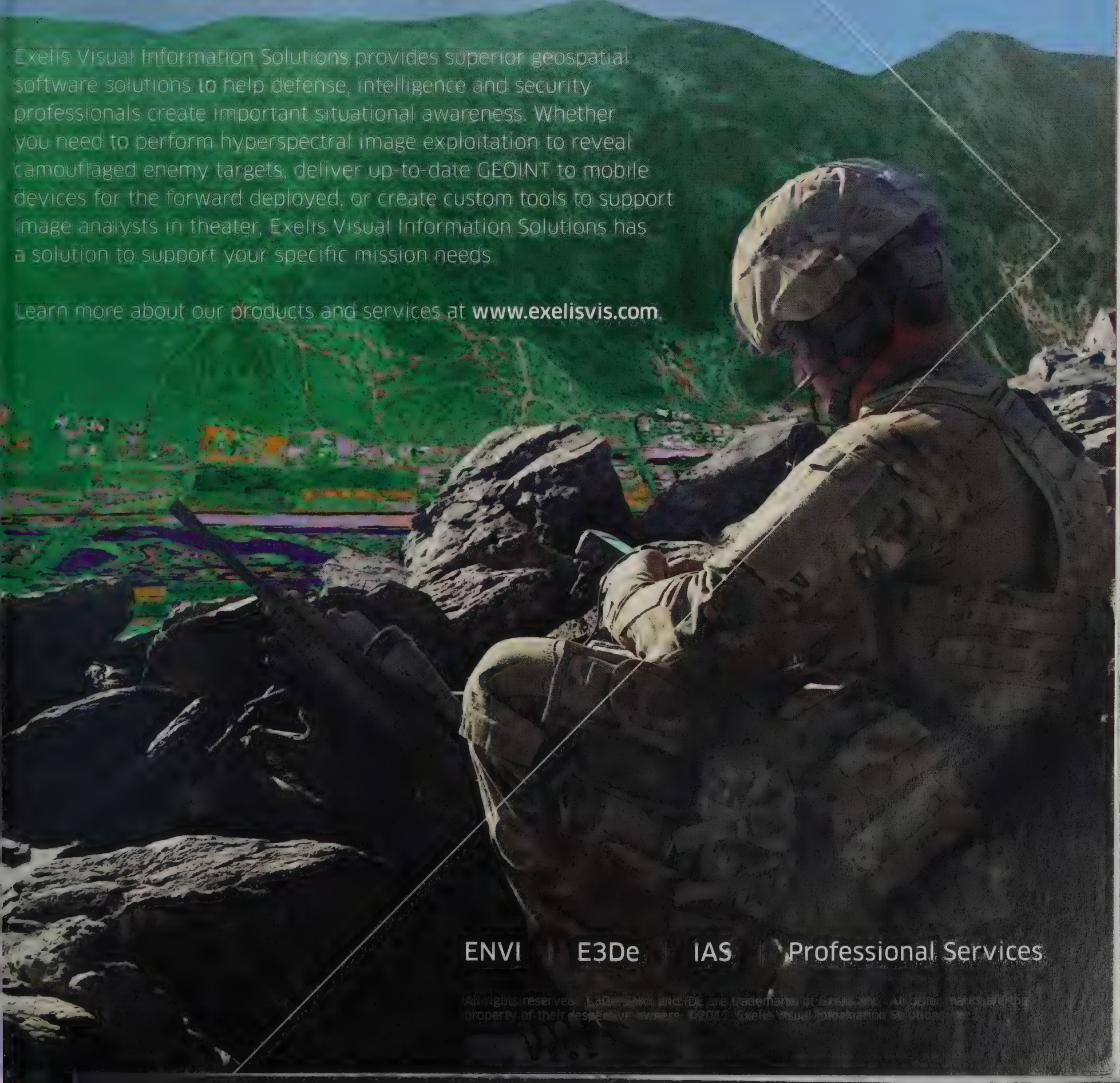
EXELIS

Visual Information Solutions

Create Situational Awareness.
Deliver Mission Critical Imagery.
Customize GEOINT Applications.

Exelis Visual Information Solutions provides superior geospatial software solutions to help defense, intelligence and security professionals create important situational awareness. Whether you need to perform hyperspectral image exploitation to reveal camouflaged enemy targets, deliver up-to-date GEOINT to mobile devices for the forward deployed, or create custom tools to support image analysts in theater, Exelis Visual Information Solutions has a solution to support your specific mission needs.

Learn more about our products and services at **www.exelisvis.com**.



ENVI | E3De | IAS | Professional Services

All rights reserved. E3De, ENVI and IDL are trademarks of Exelis Inc. All other marks belong to property of their respective owners. ©2012 Exelis Visual Information Solutions Inc.

Two of the categories used in data collected from selected CGSC and War College student samples during 1996–2010	Estimates in population
Essentially transformational: Inspirational, encouraging, puts mission and troops first; coaches, builds teams and a healthy climate; sets high standards for self and others; generates and reciprocates trust.	**30–50 percent**
Essentially toxic: Alienates and abuses subordinates; creates a hostile climate; often rules by fear; rejects bad news; seen as self-serving and arrogant; is skillful in upward relationships; usually bright, energetic and technically competent.	**8–10 percent**

Various ongoing initiatives must be integrated into a comprehensive program in which education of the officer corps on objectives, concepts and details of these initiatives would play a major role. As the CAL 2011 report states, "This problem must be attacked simultaneously at several levels." A near-term goal is precluding toxic leaders from getting into the pool of colonels who are general officer candidates—a practice that if carefully explained and fairly implemented could by itself rejuvenate faith in Army promotion and selection systems and reinforce important Army values by practicing what we preach. Such initiatives include the following.

Institute a system for regularly reporting the results of command climate surveys. This effort should parallel systems for reporting other elements of the readiness system, with Army-wide collection of periodic data. Battalion-size units and staffs at division level and higher should be the primary targets for standardized climate assessments.

Climate assessments have been around longer than the 360 process and remain an important tool for commanders. They have never been collected Army-wide with the same comprehensive regularity as materiel and training readiness reports, although we emphasize that troop morale is a vital ingredient in combat power.

Climate surveys can be designed for user convenience, are a method of reinforcing Army values and can provide advance warning of toxic leadership. (Determination of who has access to climate data and the levels of consolidation and review of reports are issues requiring careful attention.)

Provide selection boards with supplemental information from subordinates. This will enhance the validity of the top-down information now available and is the heart of any serious attempt to rid the institution of the toxic leader. Exclusively top-down assessments have failed to eliminate toxic leaders from hierarchical organizations, even those with generally solid reputations such as the U.S. Army.

The 2010 Division Commander Study recommends: "Revise significantly the process for selection to O-6 command to ensure that there are no future candidates for Division Command who have been identified clearly as toxic leaders. Specifically, provide boards selecting brigade-level commanders with supplemental data summarizing leadership behavior assessments taken from a sample of officers who had served as company commanders or principal staff offices when the individuals being considered were their battalion commanders." The description of a proposed pilot study of this procedure explains that the assessments of subordinates are taken usually one to three years after the candidate for O-6 command has departed the previous battalion-level command. (This is not use of a 360 "feedback" process. That process, designed for enhanced self-awareness and continuing growth as a leader, is used only for that purpose. It must be maintained absolutely separate from any subordinate input designed and denoted as part of the promotion, selection or assignment process.)

Given the limitations of the current database on officer performance, there may not be opportunities for the personnel management process to reliably and systematically identify the toxic leader earlier than selection for O-6 assignments. A carefully designed and closely monitored pilot program (over several years), however, may uncover possibilities for earlier intervention and would in itself indicate the Army's commitment to confront the problem.

Establish a general officer steering committee. This will report to the Chief of Staff, perhaps led by the commanding general of U.S. Army Training and Doctrine Command, to coordinate, guide and oversee the implementation of systems modifications and innovations necessary to address comprehensively the toxic leader issue while simultaneously enhancing the quality of command climates.

Do not spend additional resources on further external studies. All the necessary experience and expertise are available within Army agencies. The key is to coordinate and integrate ongoing efforts into a comprehensive program in which education of the officer corps on the toxic leader issue should play a conspicuous role.

In light of the current commitment and attention of Army senior leaders, the urgency of creating supportive climates that will motivate and retain high-quality people, and the recognition that viable solutions for solving the problem and strengthening the institution are at hand, the time seems ripe for action. ★

The 'Pot Party' at Firebase Ares

An Open Letter to My West Point Roommate, MG Neal Creighton, USA Retired

By MG Guy S. Meloy
U.S. Army retired

Dear Neal,

In your fine book about the adventures of the Creighton family [*A Different Path: The Story of an Army Family*] you reference an incident when troops from the 1st Battalion, 12th Cavalry—the battalion I commanded in Vietnam in 1970–71—made national news for being filmed smoking pot through a shotgun barrel. I thought you might be interested in what *really* happened and why, to this day, the only time I'll watch any program on one particular television network is for a good football game.

Firebase Ares, where the pot party took place, was located at the southwest sector of War Zone D. As did most fire bases and battalions at that time, we had a strict no-drugs policy. The 1-12th Cav's drug policy was enforced by the chain of command and reinforced by a very smart, very dedicated SFC named Ben Richardson. Ben was serving his second tour in Vietnam, as were most of my senior NCOs, almost every captain and major, and (as you know) myself. Ben had two Purple Hearts from his first tour, and after getting his third Purple Heart my CSM, Ed Reeder, came to me with a suggestion. "I'd like a firebase provost marshal, and Ben would be the right guy," he said. "Moreover, he deserves some time out of the bush." I agreed. Among Ben's many responsibilities, his main job was to make sure the troops brought zero pot (or any other drugs so prevalent in the 1970s) onto the firebase.

Oddly enough, we never had trouble with troops smoking pot in the bush. I think the troops' instincts for survival made it self-policing, especially in night defense positions because they knew the smell of pot would give away their location. With four rifle companies in an Air Cavalry battalion, I employed three in the jungle at all times, rotating one back to the firebase every fifth day for a cold 55-gallon shower, haircuts to keep jungle rot from ears and neck, and one hot meal a day. This company also manned the perimeter and defended the firebase. After five days I helicoptered them back into the jungle, extracted the next company due for its five days on the

firebase, and so forth. To the grunts who spent most of their time in the jungle, being back on the firebase for those five days was, in their minds, "back in the rear," even though we were a very long way from the "real" rear. Nevertheless, they had an entirely different perception of smoking pot back in the rear than they did in the bush, and that's why we needed Ben Richardson.

On the afternoon before the so-called Firebase Ares pot party, my Delta Company discovered an impressed-force labor camp in the jungle, miles from any civilization. The people in it were in absolutely deplorable condition. The company commander reported that his scouts counted almost 100 emaciated people wearing rags and guarded by a detachment of about 20 VC [Viet Cong]. It was a ticklish situation because while we wanted to rescue the people (not just men, but older women and even infants), we also knew the VC guards would not only defend the camp, they would possibly (probably?) execute the labor force rather than allow us to secure them.

I had the company maintain visual contact with a small element of what were called Kansas City Scouts—former VC who had defected and been assigned to each rifle company as both interpreters and lead scouts. I might add that we had terrific support from these guys, and in my case not a single one ever turned out bad. I ordered Delta Company to stand back several hundred yards to avoid detection, had Bravo Company located 10 or more klicks away move to a PZ [pickup zone] and brought them to a three-ship LZ [landing zone] located about a klick northeast of the camp. I now had my guys blocking the south and southwest and the north and northeast sectors from the camp. Unfortunately, it was not possible to extract my third company to help block either the northwest or southeast sectors.

That night we managed to remove six to 10 at a time out of the camp under the very noses of the guards, assembled them almost two klicks away in an old Montagnard slash-and-burn field, and then transported them to the firebase one helicopter-load at a time. It took most of the night to complete the evacuation. As you might imagine, extricating the people from the camp with our Kansas City Scouts doing most of the dirty work was a tricky and very sensitive operation.

You would not believe the condition of these people: infants covered with jungle rot from the soles of their feet to the tops of their heads, "grandmothers" so weak they could not walk and had to be carried, every adult and every child with the so-called thousand-yard stare, their clothes in tatters and virtually falling off their backs. They looked as if they were fugitives from Dachau. Our battalion surgeon was so choked up he could hardly talk. Our medics worked for hours treating them.

By noon on the day of the "pot party" we had evacuated the last of them by CH-47 Chinook to GVN [government of Vietnam] control for continued treatment. During the early morning hours the guards apparently discovered the camp was empty and started searching for them. Right around BMNT [beginning of morning nautical twilight] they ran into Delta Company, who shot up a bunch. By about 0730 the guards were reinforced from the north and northwest by what we estimated to be a reinforced VC company. By first light we had a real donnybrook on our hands. We attacked the camp, and by 0730 our supporting artillery was firing almost non-stop along with four helicopter gunships in support.

At about 0800 a helicopter landed at Firebase Ares with a three-man television crew from a U.S. network. The battalion had not been notified they were coming. When the TOC [tactical operations center] reported they were there, I immediately smelled a rat, but under the circumstances there wasn't much I could do about it. I naively thought, "Surely the TV guys must have heard about the impressed labor camp we had rescued and wanted to film the people and the way our medics were caring for them." Still, my sixth sense said, "Be careful. That may not be the real purpose of their visit." I informed the TOC to have the assistant communications officer escort them "every minute, every step. Never let them out of your sight." With that, I forgot about them and concentrated on the fight.

That morning we fired almost 4,000 rounds of artillery, and gunships were flying from every direction, often right over the firebase. On several occasions dust-offs brought lightly wounded troops directly to the firebase aid station. As you can imagine, Ares was a busy firebase.

The fight continued until late morning. By about 1300 the VC had had enough and quietly pulled away. One of the first questions I asked after returning to the firebase was "Where are the TV guys?"

"Sir," I was told, "they left about a half hour ago." I breathed a sigh of relief and thought nothing more of it.

That was mid-October 1970. On Thanksgiving Day the battalion moved from Firebase Ares to the central sector of War Zone D and opened a new firebase we named Jupiter. Several days after Christmas, Jupiter was descended upon by all sorts of IGs [inspector generals] from Saigon and Bien Hoa—probably Tokyo and Honolulu and maybe even London, I suppose. They were accompanied by two full colonels who did not appear to be very happy. The only thing the group seemed to have in common was they all wanted to lynch me on the spot, no questions asked. Before I could ask, "And to what do we owe this honor?" or words to that effect, I was bombarded with a lurid description of a news reporter's one-hour special televised during

---

***MG Guy S. Meloy**, USA Ret., served in various command and staff positions over the course of his Army career. He commanded four platoons, three companies, two battalions—one for six months as a major, the second for 12 months as a lieutenant colonel, both in Vietnam—and a brigade. He was an assistant division commander and commander of the 82nd Airborne Division as well as director of training in the Office of the Deputy Chief of Staff for Operations and Plans. He is one of the few officers to have worn the green tabs of a troop leader as well as serve on parachute status at every rank from second lieutenant to major general.*

CAT® HEAVY EQUIPMENT

TRAINING & SAFETY COURSE

July 9 to 13, 2012 | Peoria, IL | Registration Deadline: June 22, 2012

Operator Course: $900
Maintainer Course: $1250

Leading in Technology...

Are your Operators and Maintainers Ready?

Caterpillar Edwards Demonstration & Learning Center – Peoria, IL

Whether it's maintaining your Cat® Engines or Equipment, meeting EPA Emissions Standards, increasing fuel economy, or integrating the latest grade control or electric-drive technology into our world-class construction equipment, you can rely on Caterpillar for all your equipment, product support and training solutions.

Caterpillar Defense & Federal Products Division is offering two concurrent Training & Safety Courses in July 2012. One focused on operator training and the second focused on maintenance training. Participants will experience the equipment evolution first hand with training in the following areas:

Basic Equipment Operation, Safety, Technology Upgrades, Performance and Fuel Economy Enhancements, Diagnostics and other Maintenance Procedures.

SPACE IS LIMITED... PLEASE CALL YOUR ACCOUNT MANAGER TO REGISTER TODAY:

JAN KIRKTON
309.675.4405
Kirkton_Janet_L@cat.com
- *US Army*
- *US Army Public Works*
- *US Army National Guard*
- *US Army Reserves*

LORIE HUFF
309.494.3430
Huff_Lorie_A@cat.com
- *US Army*
- *US Army Corps of Engineers*

MELVIN OTTLEY
309.578.8068
Ottley_Melvin_L@cat.com
- *US Air Force*
- *US Air National Guard*
- *DRMO*

SCOTT TOMBLIN
309.578.2244
Tomblin_Scott@cat.com
- *USMC*
- *US Navy*
- *USMC/USN DPW*

RICH GARDNER
309.578.3984
Gardner_Rich_M@cat.com
- *Customer Support Program Manager*

www.catdfp.com

CAT®

© 2012 Caterpillar | All Rights Reserved | CAT, CATERPILLAR, their respective logos and "Caterpillar Yellow", as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.

the Christmas holiday season. The title of this special was "The Pot Party at Firebase Ares." Apparently it had been viewed by an audience of a billion people worldwide, including GEN Westmoreland, then-Chief of Staff of the U.S. Army. He was understandably, I suppose, very upset, so much so that he ordered an immediate investigation, which many of those from Saigon assumed meant "relieve that sorry battalion commander"—and most of them seemed anxious to do just that.

What saved my goose was that MG George W. Putnam Jr., my division commander, and COL Robert (Bob) D. Stevenson, my brigade commander, backed me to the hilt. I was called off to the side and told, "Sandy, if any of these fellows recommend you ought to be relieved, I've told them that if you go I'm going with you." That saved my command—and my career. It goes without saying that I would do anything for George Putnam and Bob Stevenson, officers who understood loyalty down as well as up, men with tremendous courage.

A week later, a lieutenant colonel from Saigon came to Jupiter to show us a video of the television program. He brought a small TV that we hooked up to the TOC generator. Several of us watched it with our jaws hanging down around our belt buckles. The opening scene showed two troopers sitting on the top of a bunker smoking a cigarette. The narrator opened by saying, "The war's over, the troops are bored," and soon after the scene confirmed the troops were bored with nothing to do, the film slowly panned across an almost empty firebase and came to a stop on a 105 mm howitzer pointing almost straight up to the sky. The narrator continued, "And the guns are silent. It's time to stop this nonsense and bring the (poor, bored, restless) troops home." Mind you, this video was shot at the same time the battle was raging not more than 8–10 klicks from the firebase and while the artillery fired 4,000 rounds, gunships everywhere, and CH-47s were coming and going to evacuate the impressed laborers. Obviously, the entire scene had been carefully staged to present a quiet, almost serene firebase doing very little other than taking up time and space in the jungle.

The film next panned down the narrow trail from the firebase to the water point. As soon as the trail curved out of sight of the firebase, the scene shifted to three soldiers several yards off in thick bamboo smoking a marijuana cigarette held at the muzzle of a shotgun named Ralph, according to the film, while the smoker inhaled at the breech. As you would expect, their faces were blurred out so there was no way to identify them. To say that it left a damaging impression is an understatement. After viewing the show I understood why so many people from higher headquarters were upset, because I was, too.

Ben Richardson was both apoplectic and apologetic. He took it personally. I assured him it wasn't his fault by any means, the colonels finally stopped coming to the firebase, and in time we put this horrible incident behind us and focused on daily operations.

Now fast-forward from October 1970 to July 1971. The battalion was in another firebase, Timbuktu, located at the extreme north sector of War Zone D. Other than the fact that it was saturated with hard-core VC and several NVA [North Vietnamese army] units, it was a beautiful area with mountains, waterfalls and a cool climate. I had made it a practice to talk personally with every trooper rotating home at the completion of his tour. I would thank them for their service to the country and the Army and assure them they could walk down any street at any time and look anyone in the eye and say, "I served my country in combat. What have you done for our country?"

A week before their rotation date I'd bring them out of the jungle on a resupply chopper, assemble them in a small tent we used for briefings, and talk to them for several minutes to wish them luck and say an "official" goodbye. Sometimes I might talk with as many as four or five, sometimes only one man. One afternoon as I finished talking with a group of three troops, one asked me afterwards if he could talk to me privately. He told me—and this is as verbatim as I can recall after so many years—"Sir, I would hate to leave the battalion with a guilty conscience. I was one of the guys smoking pot at Firebase Ares." I was startled, blinked, and said, "Tell me about it." This was what he said:

"My buddies and I were standing in the chow line for dinner when we noticed those TV guys and a lieutenant had joined us. The lieutenant said he had to use the latrine but would be right back. As soon as he left one of the TV guys asked us, 'Do you guys have any pot?' We laughed and told him, 'Nope, this battalion is pretty tough about that.' Then the guy said, 'What if I told you I had some pot—is there any place we could go to smoke it?' Right away my buddy, who was a point man and always carried a shotgun, said, 'Yep, the water point.'

"So we headed to the water point and the TV guys asked us to try to smoke the pot through the barrel of the shotgun because that would look like what he called a showstopper. He promised our faces would be blurred out, so we did what he asked and smoked the pot through the shotgun."

"Where did you get the pot?" I asked.

"The TV guys brought the pot with them—it was in the pocket of the guy who did all the talking," he said.

For some reason I wasn't surprised. I had a long-held suspicion that something about the pot party at Firebase Ares didn't ring true; now I knew. It had been deliberately set up and carefully staged, apparently for the purpose of TV ratings and to persuade the public that the Vietnam War was senseless and, indirectly, that the Army was returning potheads to society.

Neal, now you know why I take most television news with a grain of salt, and why I watch only football on that particular network.

Onward,
Sandy ★

The Relevancy of a Staff Ride To the Modern Field Artillery Battalion

U.S. Army/1LT Thaddeus C. Fox

Staff ride leader MG David Zabecki, USA Ret., leads discussion of the German army's laying artillery fire on French soldiers defending the city of Verdun, France, in World War I.

By CPT Vinh Q. Bui
and
1LT Thaddeus C. Fox

It is easy to believe that young officers are competent in core branch functions because they successfully completed training center rotations and combat deployments. They effectively employed Field Artillery systems to respond to maneuver requests for support, to defend fixed sites and to provide nonlethal effects. Therefore, they are subject-matter experts but only in a self-contained bubble of experience.

For the majority of our Field Artillery junior leaders, the lessons of combined-arms operations consisted of a few days of the antiquated Joint Army Navy Uniform Simulation exercise in the Officer Basic Course at Fort Sill, Okla. While the terms "back to basics" and "focus on the fundamentals" are thrown about, we must think about the explicit meaning in the context of all our levels of leadership. While it is easy for us to slow down training, pull out the manuals and train to doctrinal standards, it is not as easy to address how to apply doctrine properly.

One of the best ways to study our profession is to go back to its beginning and place ourselves in the boots of its pioneers. Rather than looking at the lessons learned from the last war, we must academically study the development and history of our branch through all wars—from the earliest field artillery pieces used by Gustavus Adolphus in the Thirty Years' War (1618–1648), when infantry formations directly supported field pieces to break up dense infantry formations, to World War I, when artillery shifted from a direct-fire weapon used against an enemy arrayed generally in line into an indirect-fire weapon targeting the enemy in depth.

To truly understand and appreciate these lessons, there is no better way than a battlefield staff ride to one of the best-preserved World War I battlefields.

U.S. Army

Right, an African-American infantry unit marches northwest of Verdun in November 1918. Below, American soldiers lined trenches near Verdun in a 10-month battle of attrition. A staff ride to the battlefield, one of World War I's best preserved, offers an opportunity to study firsthand how Verdun inspired modern field artillery tactics, techniques and procedures.

U.S. Army

Fires Squadron, 2nd Cavalry Regiment traveled to Verdun, France, in order to study the predominantly artillery-driven battle that occurred there.

A tenacious battle of attrition, Verdun gave birth to many modern artillery applications still used today, although it is difficult to imagine that the relatively static trench warfare of almost a century ago could offer valuable lessons in adaptability. Verdun started out as a nine-hour German artillery barrage, dragged out into a 10-month artillery duel, and ended with a well-synchronized and well-integrated fire-maneuver offensive that allowed the French to regain many lost positions.

The battlefield of Verdun, like many other battlefields of World War I, was the experimental grounds for the application and refinement of field artillery tactics, techniques and procedures. The practical use of indirect fires progressed to a very mature state during this war. These battlefields saw one of the earliest uses of aerial observation to direct and adjust indirect fires. Pilots marked positions and dropped notes to notify batteries to adjust fire. It also forced artillery to discover a means of registration whereby they could adequately predict fires, which required an understanding of meteorology.

As primitive as they were by our standards, these techniques proved very effective at Verdun. The concept of call for fire as we know it today was still very new in this conflict. Artillery support was preplanned and very difficult to adjust hastily once the battle started. The concept of final protective fires as we know it began with infantry units who were issued signal flares to request for fires in an emergency. Many of these signals were never visually spotted by the artillery batteries in the smoke and confusion of the raging battle. Those artillery units that managed to see the signal flares and respond to the final protective fire request frequently missed the target or ended up causing as many casualties among their own troops as to those of the enemy. Despite their many initial flaws, the concepts represented initial attempts at coordinating for indirect fire support of embattled friendly forces that were perfected over time. The field artillery doctrine that we employ today has its roots in the ingenuity of artillerymen of that era.

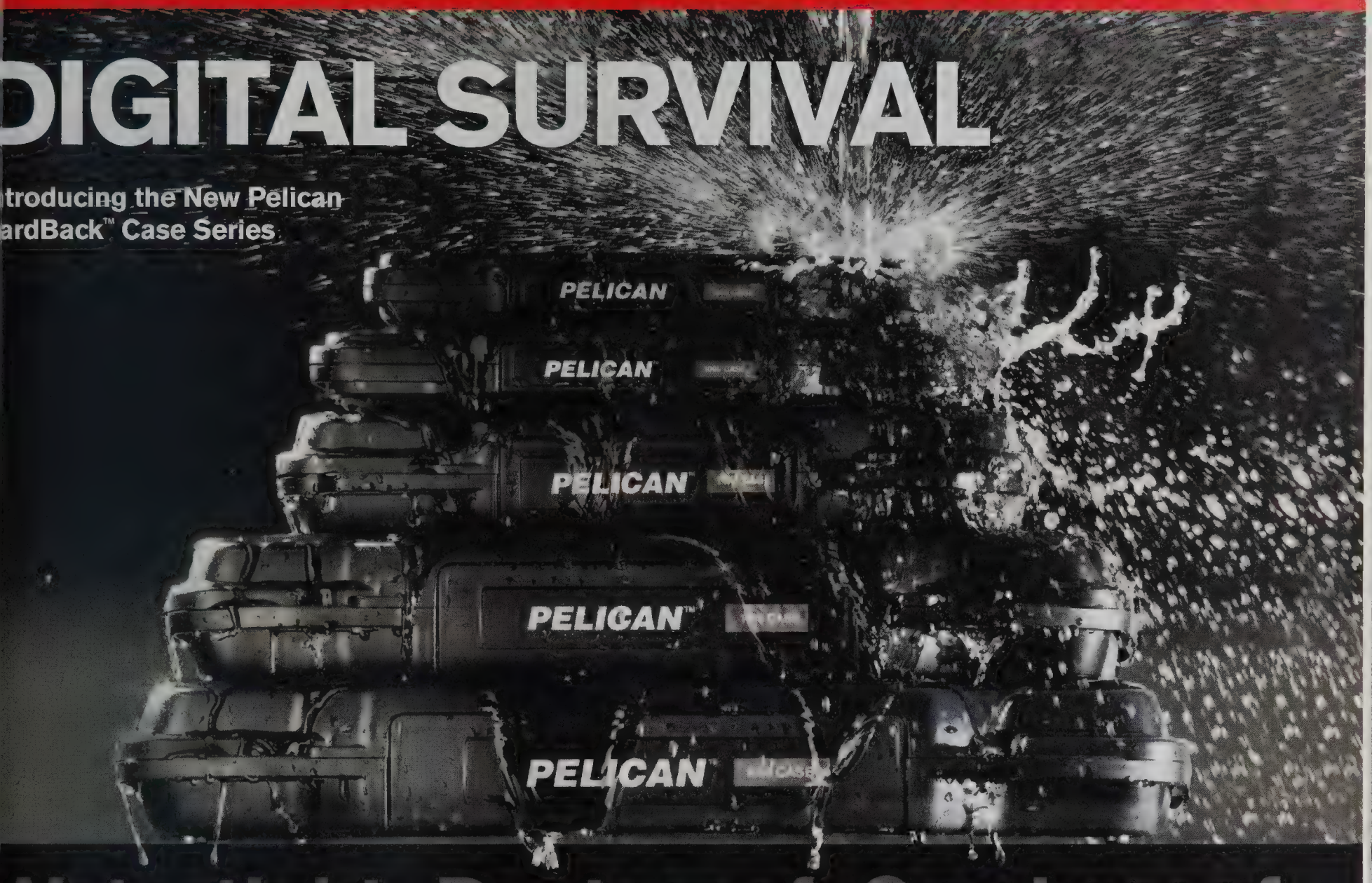
The ingenuity and adaptability of leaders in World War I produced one of the first uses of a "creeping barrage" employed in close support of the infantry. The French, under Gen. Robert Nivelle, employed this highly effective technique when they launched their counteroffensive toward the last month of the battle to regain lost positions. Under this technique, the French infantry advanced at a carefully prescribed rate of 100 yards every four minutes, staying 75–150 yards behind the advancing artillery in order to neutralize the deadly fires of the German infantrymen and machine gunners, who would normally wait for a telltale lifting of the barrage before firing on attacking infantry formations. This technique required precision-fire planning and effective synchronization of maneuver forces, which is very difficult to execute even with today's advanced communication systems. The creeping barrage allowed the French to drive the Germans back to roughly the initial start point of the battle. Advances in munitions technology, which vastly increased both the burst radius and fragmentary effectiveness of munitions, make this technique riskier to execute, but the principle is still very effective.

CPT Vinh Q. Bui *was commissioned a field artillery officer upon graduation from the University of Vermont in 2007. He deployed to Iraq in 2008 and to Afghanistan (2010–2011) where he served as a troop fire support officer, squadron logistics officer and senior advisor to the Afghan National Police Training Center in Zabul Province.* ***1LT Thaddeus C. Fox*** *is a 2009 graduate of the United States Military Academy, where he studied military history. He is battery executive officer for Bulldog Battery, Fires Squadron, 2nd Cavalry Regiment (CR), Vilseck, Germany. He previously served as a fire support officer for Mad Dog Troop 4/2 CR during Operation Enduring Freedom (2010–2011).*

PELICAN™

DIGITAL SURVIVAL

troducing the New Pelican
ardBack™ Case Series



Watertight | Dustproof | Crushproof

1055cc Case

Fits
- Kindle Fire™
- 7" tablets
- eBook readers
- Blackberry Playbook

1065cc Case

Fits
- iPad® 1, iPad® 2, iPad® (3rd generation) with or without Smart Cover
- 10" tablets

i1075 Case

Fits
- iPad®1,2, and 3 with cords, power brick and keyboard
- Netbooks
- 10.1" tablets

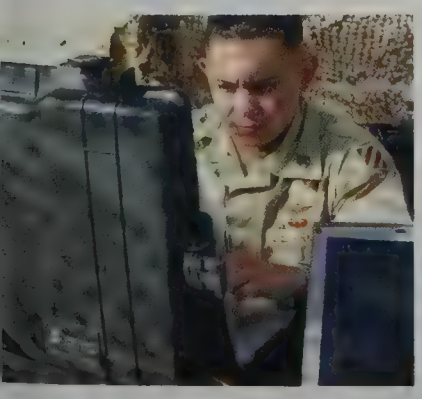
1085cc Case

Fits
- 14" Laptops

1095cc Case

Fits
- 15.6" Laptops
- 17" Macbook Pro®

Case contents not included.



Extreme Protection for Extreme Conditions

Pelican Hardback™ Case Series: 5 new cases to keep your digital assets safe. Known worldwide as the leader in asset protection, Pelican™ cases keep million dollar unmanned aerial vehicles operational and custom 3D camera lenses dry. Our new Hardback™ case series offers the same level of protection for your laptop, netbook or iPad®. Count on our watertight, dustproof and crushproof cases to cover your digital assets when all hell breaks loose.

PELICAN™

www.pelican.com/am

Pelican Products, Inc. 23215 Early Avenue, Torrance, CA 90505
866.291.8029 (TOLL FREE) Tel 310.326.4700 • Fax 310.326.3311

All trademarks are registered and/or unregistered trademarks of Pelican Products, Inc., its subsidiaries and/or affiliates

U.S. Army/1LT Thaddeus C. Fox

CPT Vinh Bui (left) and 1SG Shawn Connell check out various rifles used by both sides during the Battle of Verdun.

An important lesson learned from the creeping barrage is one of adaptability. Leaders must continue to adapt to the changing situation by modifying their tactics, techniques and procedures. Leaders at Verdun faced the horrors of massed infantry formations being decimated by machine-gun positions emplaced in well-fortified trenches across "No Man's Land," so they adapted the creeping barrage to overcome that obstacle.

The Germans, who learned their lessons the hard way at Verdun, also modified their tactics. When the French sought to emulate their success at Verdun by reapplying the creeping barrage in the 1917 *Chemin des Dames* campaign, their massive barrages fell on empty trenches. The Germans, having learned their lessons well, had abandoned their frontline positions and withdrawn to secondary positions farther to the rear. Their intact machine guns and ready defenders inflicted horrendous casualties on the attacking French. These casualties ultimately led to the total collapse of morale and widespread mutinies within the French army.

Today's field artillerymen could easily identify with the century past. The principles of the five requirements for accurate, predicted fires were still in their infancy, continuously being refined and perfected to a science by the end of the war. Technological advances such as laser rangefinders, position locating systems, precision guided munitions, sophisticated meteorological systems, automatic fire control and advanced fire direction systems were beyond the wildest imagination of any World War I field artilleryman. These early pioneers did not fight with the Advanced Field Artillery Tactical Data System or Excalibur satellite-guided rounds, yet their revolutionary ideas initiated even greater changes in a span of four years than has our revolution in technology. They fought with the tools available to them, using their knowledge, training and ingenuity to accomplish their mission.

During Fires Squadron's recent staff ride to Verdun, we were introduced to the tactics and strategy of one of these prominent pioneers of modern field artillery, Georg Bruchmüller, the German artillery commander on the Western Front. Bruchmüller constantly focused his efforts on achieving effects and developed creative ways to meet his commander's intent rather than blindly following his orders to the letter. For instance, in order to achieve first-round effects on a target, Bruchmüller took great pains to preregister his artillery in areas where the enemy did not observe it. He sought to tailor the effects of his fires by predesignating different munitions for enemy formations. For example, he would fire persistent chemical munitions at enemy artillery to prevent them from firing, then use long-range artillery to disrupt their movements, while focusing his heavy-caliber howitzers on enemy defensive positions and simultaneously moving supporting pieces forward to exploit gains with the infantry. All of these artillery units' fires used extensive target list worksheets to control fires. Bruchmüller's fellow commanders believed primarily in the destructive use of fires of the highest caliber, focused in the Jominian style and on a single point. Bruchmüller advocated neutralization over destruction, saying, "We desired only to break the morale of the enemy, pin him to his position, and then overcome him with an overwhelming assault." Bruchmüller, who had not especially distinguished himself before the war, would go on to serve as the German artillery chief on the Western Front and, in Erich Ludendorff's words, become "one of the most prominent soldiers of the war."

Artillery officers must be able to rapidly identify the needs of maneuver forces, not only with doctrine but also through immediate after-action reviews tailoring their forces to meet the commander's intent, not necessarily his direct orders. In the words of former Chairman of the Joint Chiefs of Staff, Gen. Peter Pace: "Devote time to think, read, and write. Intellectual breadth and perspective lead to solutions. We cannot gain their benefit if we are unable to periodically detach ourselves from the day-to-day tasks that are a necessary part of our duties. Each of us must regularly carve out time to look beyond the present."

What better way is there to train ourselves to think critically, engage in an academic pursuit, broaden our perspective and see examples of how others have solved artillery problems than through a battlefield staff ride? While there are many opportunities for academic development throughout an officer's career, they tend to focus primarily at the commissioning source, entry-level training and higher staff positions. There is relatively little opportunity at the battery and battalion levels for group academic development. Taking a few days away from the office and studying a historical situation and its significance is a great way to knock off the cobwebs of reading and writing critically. At the same time, such an activity broadens our vision, both by putting us into the perspective of someone else in another time and by forcing us to consider the rationale behind that individual's decision-making process. ★

CompanyCommand

Building Combat-Ready Teams

To: Company Commanders
From: Company Commanders

Third-Generation Leadership—Redux

In the June 2007 issue of ARMY Magazine, we asked you to think about one person who has significantly influenced your development as a leader and to picture this person in your mind. We shared the example of Steve Delvaux who, as a young lieutenant, was influenced by his company commander, Hank Arnold. Later, Hank's imprint was evident in the way Steve developed his own lieutenants. Hank Arnold's legacy is the leaders that he influenced and the leaders that those leaders are influencing today and will influence in the future.

In this article we want to share another 3GL (third-generation leadership) story, one that involves several generations of leaders, among them, Joe Byerly. "I recently passed the guidon," he says, "and went through a process of reflecting on my experiences of commanding two companies. In the process, it became clear to me that much of who I have become as a leader, including many of the ideas we implemented, has grown from seeds planted by my very first troop commander, CPT Louis Netherland. The 3GL idea made me wonder who influenced Louis. So I asked him."

Louis Netherland

Then-LTC H.R. McMaster was my first squadron commander. I was not a natural-born platoon leader, and when I reported to my first unit in 2000, I was a college graduate fresh out of Officer Candidate School. My learning curve was vertical, and the things I didn't know about soldiering could have easily filled a major metropolitan library. LTC McMaster had a significant impact on my development, and I have tried to extend the lifespan of that influence through every Soldier I have worked with since then. These are the top three things that LTC McMaster deeply ingrained into his leaders:

■ *A Clear and Consistent Message Goes a Long Way.* Every lieutenant and most of the captains in the squadron could do a reliable impersonation of LTC McMaster. The key to getting the bit right was to recite any one of his oft-repeated maxims for success in training and for executing the squadron mission-essential task list. These were not fluffy catchphrases or vague talking points. These were targeted principles for victory, and they were just general enough to be applicable to a variety of conditions on the symmetric and asymmetric battlefields. During after-action reviews, training meetings and officer professional development [OPD] sessions, the squadron commander would draw from these again and again, emphasizing their application and relevance. These messages became a battle drill, and one lieutenant could recite the beginning while his wingman finished the closing words for him.

There will be some who read this and argue that such a method created junior leaders who couldn't think for themselves—automatons who had to refer to rote memorization in order to choose a course of action. Within the squadron, however, LTC McMaster's clear and consistent message had precisely the opposite effect. There was no doubt in any officer's mind as to what the commander's expectations were and where he stood on the most critical aspects of our mission. Armed with this knowledge, the green-tab leaders were empowered to act decisively, aggressively and, most importantly, with creativity and adaptability.

> *"While they influence primarily by role-modeling how to lead, [leaders with a 3GL perspective] also impart 'the why' behind their actions in such a way that their Soldiers are not only inspired but also are equipped to do the same with their subordinate leaders."*
>
> —ARMY Magazine, June 2007

This is what leaders owe those who work for them. Tell your Soldiers what is important to you, provide that unwavering azimuth, and then watch great things happen when Soldiers can be confident in knowing where you stand.

■ *Mentorship is a Duty.* When I sat down for my first OER [officer evaluation report] counseling with LTC McMaster, I had no idea what to expect. After he took 30 minutes to dis-

CPT Louis Netherland (left) and then-2LT Joe Byerly with their spouses in 2004. Byerly says his first troop commander nurtured "the scholar, the artist and the family man" as well as the warrior persona.

cuss my strengths and weaknesses with me, I thought we were wrapping things up. That's when he took out a pen and a sheet of paper and said, "Let's talk about what's ahead in your future." For the next 30 minutes, he sketched out a timeline with hash marks at the points when I would likely take charge of a scout platoon, when I would become a troop XO [executive officer], and when I would head to the Captain's Course.

I wouldn't realize it until much later, but the fact that the squadron commander took the time to discuss in depth not only his observations of my performance but also his plan for me (even the fact that he *had* a plan for me) isn't necessarily the experience of lieutenants in our Army. And he did this with everyone he rated or senior-rated: Out came the pen and paper, on came the *Let's talk about your future* and the *What do you think you're interested in doing after this?* or the *Have you ever thought about perhaps doing something like … ?* This had a ripple effect—the idea that since he cared so much, so should I. Many of the lieutenants would get together after their OER counselings and talk about how they were ready to storm the Normandy beachhead after walking out of his office.

Maybe the greatest duty we owe our fellow Soldiers is mentorship, and while I have seen countless examples of it at all levels, it's still common for me to encounter a junior officer or ROTC cadet who seems surprised when I have taken the time not only to talk but also to listen. There are few worse feelings for a new officer than that of being set adrift to figure it out on your own. It's not that figuring things out independently doesn't have its positive character-building aspects; it's when that feeling is accompanied by the suspicion that your boss has neither the time nor the desire to have a conversation that the dark clouds appear.

■ *Thinking on Your Feet First Requires Someone Who Can Think.* OPDs in the Quarterhorse (1st Squadron, 4th Cavalry Regiment) were regular and lively affairs. As a former history professor at the United States Military Academy, LTC McMaster

CPT Netherland, awarding 2LT Byerly his spurs upon completion of the 5th Squadron, 15th Cavalry Regiment Spur Ride in 2004, believes that "mentorship is a duty."

typically governed over a broad reading list that, while usually military-themed, offered us the opportunity to consider lessons learned that went far beyond tactics and strategy. When we read about the Desert Fox or the Ia Drang Valley, it wasn't enough to know that Erwin Rommel or Hal Moore knew how to command troops in the field; it was more important to understand what made them tick: What were the fundamentals they held dear, the ones that shaped them the most as leaders and men?

When we read *Acts of War* by Richard Holmes, it wasn't to be able to spin off some cool historical anecdotes but to understand what happens to men in combat so that we could be better prepared to lead them through that crucible. LTC McMaster emphasized personal and professional development that was big and cosmopolitan. Field manuals [FM] were, of course, required reading, but when he mentioned once that he had recently reread *Catch-22*, it let me know that it was OK—and even encouraged—to color outside the lines.

The squadron commander knew that in order to build aggressive and adaptive young officers who could think on their feet, they first had to learn how to think, and to think about things that went far beyond occupying an attack-by-fire position. The ability to draw on a broad base of knowledge, some of it outside of your comfort zone, builds confidence and an agile mind. Perhaps the captain with *The Bookseller of Kabul* in his ruck instead of some tired military history of Afghanistan comes out on the other side with a better perspective on how to do his job. Maybe the lieutenant with a copy of *In Pharaoh's Army* at his bedside along with FM 3-20.98 *Reconnaissance and Scout Platoon* is more ready for the moment of truth.

Joe Byerly

My first assignment in June of 2004 was at Fort Knox, Ky., as an executive officer in Bravo Troop, 5th Squadron, 15th U.S. Cavalry Regiment (19D One Station Unit Training) under the command of CPT Louis Netherland. I remember feeling overwhelmed by all the things I didn't know as a brand new officer, but CPT Netherland always took the time not only to explain the "what" to me but also the "why" and the "how" if required. His engaged style of leadership eased my anxiety, which allowed me to become a sponge and focus on growing professionally.

■ *You Can Effect Change in an Organization.* Never satisfied with the status quo, CPT Netherland would occasionally identify a missing aspect of a training event or ceremony that could make the experience richer for the Soldiers who were executing it, and then he would fix it. I would watch as other commanders from across the squadron adopted and implemented ideas that began with my troop commander. Over time, his personal actions affected the entire squadron.

> *"Success is not developing great leaders. Rather, success is developing great leaders who themselves have a personal vision to develop great leaders."*
>
> —ARMY Magazine, June 2007

One day during a conversation over training, we began talking about the importance of 19D Cavalry troopers understanding their history and lineage. We both felt like the current instruction that was being offered to trainees was lacking, and it was at that point that CPT Netherland encouraged me to do something about it. Over the course of the next six months, with his guidance, I worked closely with the branch historian to rewrite the program of instruction [POI], and that POI remained in use for years after I left.

An important thing to note about CPT Netherland's desire to implement change was that it was never about him; rather, it was about the Soldiers who would benefit from it. He cared more about the greater good of the organization than he did about OER bullets. This was apparent to all of his subordinates, and so with every idea he wanted to bring to fruition, he had support from everyone.

■ *Take Time to Listen and Provide Feedback.* On several occasions over the course of that first year, we sat down to discuss not only my career path but his as well. This was helpful in understanding what was out there beyond platoon-leader time, and by the troop commander opening himself up about his own experiences and concerns, it allowed me to begin mentally preparing myself to be in his shoes

CPT Byerly (center, right) with his officers on Contingency Operating Site Marez overlooking the city of Mosul, Iraq, in 2010, credits CPT Netherland with "much of what I have become as a leader."

one day. I would have probably gained some of this knowledge in OPDs, but I don't think it would have taken hold as it did in those one-on-one counseling sessions.

When I made mistakes, which were numerous, CPT Netherland and I would sit down and work on a solution together. From there, he would ensure I captured the lessons learned, which became a large source of my professional growth.

His ability to listen and to provide feedback showed me that my commander cared about my development as one of his subordinates, so I always took what he said to heart. His mentorship also didn't end when I left the unit, or when we held the same rank for a brief period of time. I've continued to seek his feedback and counsel seven years after he was my commander.

■ *Officers Must be Well-Rounded.* CPT Netherland preached the importance of being well-rounded. We trained for and ran in a half marathon as well as numerous other races. We took our wives to nice restaurants and to Broadway plays in Louisville, Ky. We discussed doctrine, but we also discussed books and articles that would expand my horizons as an officer.

The troop commander showed me that those preconceived notions that I had about what a platoon leader or company commander should be were all wrong. The warrior persona, while important, must be backed by the scholar, the artist and the family man. All of these areas must be continually nurtured in order to be successful.

Focusing on making impacts, mentorship and being well-rounded have shaped my leadership philosophy, as well as having served as the foundation for who I am as an Army officer.

Travis Johnson

My first company commander was CPT Joe Byerly. As I reviewed this article, it was really interesting to read about the leaders who influenced him; it is obvious to me how H.R. McMaster was reaching through Netherland and Byerly and touching me. Pretty inspiring to think about! Here are a few things that I've learned:

■ *Providing Opportunities to Grow.* I joined Charlie Troop, 3rd Squadron, 7th U.S. Cavalry Regiment as the troop fire support officer in the summer of 2010, six months into their deployment to Iraq. I learned a lot from Joe Byerly, my commander, and one of the things that really stuck with me was being given the opportunity to fail. I don't want to give anyone the wrong idea: I was not set up for failure. Rather, I learned valuable lessons by being given the opportunity to sink or swim. I knew that if I wanted to become a better officer and develop professionally, I needed to be able to handle the tasks that were given to me. I looked forward to the opportunity to sit in his place during meetings and brief the squadron commander on our operations while CPT Byerly was out with the rest of the troop, as this gave me a chance to see firsthand what was happening at the higher level. I wanted to be taken seriously and understand the information, so I learned to prepare for what I was going to brief. CPT Byerly provided guidance, and we would rehearse to ensure that I was ready.

■ *Professional Development.* On numerous occasions, my commander assigned books for us to read as well as a deadline for completing the reading. Once we were done, we would go to lunch and discuss topics of the book and how they might relate to what we were working on at that time. Once I realized how valuable this training could be, I took it upon myself to find new and challenging books that I could use to grow in order to continuously develop my leadership skills as an officer. Now, wherever I go, I always have a book with me, or in mind, that I know I can reference to find something that correlates with what I am doing. Learning to apply the lessons learned is something I will carry with me for the rest of my career, as well as my life.

■ *Team Building and Unit Cohesion.* I've also learned the value of team building and cohesion. Our troop volunteered for "Homes for Troops"—a program to build homes for disabled veterans—and we ran races together, including 5- and 10-kilometer road races, half marathons, marathons and triathlons. Our troop had a professional reading list, and leaders were encouraged to read on their own time. We designed t-shirts and decals bearing the troop name and insignia, all to build team cohesion and

Second LT Travis Johnson takes notes as CPT Byerly (right) discusses an operation with an Iraqi commander in September 2010. Johnson says Byerly gave him "the best opportunity to succeed."

CPT Byerly congratulates 2LT Johnson on receiving an award in Iraq in 2010. "I learned the importance of good character from my first troop commander," says Johnson.

make us proud to be a part of something bigger than ourselves. Not all Soldiers will volunteer to run races on their weekends just to improve their fitness or to read books in their off-time just to become better at their job. In order to encourage these activities, a small incentive was provided for the effort: After a certain number of races were run, or a certain number of books were read, Soldiers were given a chance to spend some extra time with their families on days when the mission allowed. Encouraging these types of activities not only helped Soldiers develop professionally and personally but also improved their morale.

■ *The Value of Character.* Finally, and perhaps most importantly, I learned the importance of good character from my first troop commander. Of course, I've always known that trustworthiness, treating others with respect and hard work are important. My commander, however, was a prime example that character traits such as these not only help in your own development but also play a large role in the development and attitude of those around you. CPT Byerly was always true to his word—he never said one thing and did another. It was evident that he cared about the well-being of his Soldiers and was never above getting his hands dirty if need be. Those in his presence saw his genuine nature and his work ethic, which made his Soldiers want to work for him and helped keep morale high. This can go a long way when you are in a leadership position.

All of these lessons have made me a better officer and a better person. I will continue to use them professionally and personally to ensure that I give myself and those around me the best opportunity to succeed, which is what was given to me by my first troop commander.

Every single day, we are creating a legacy of leadership that is impacting units and Soldiers, now and long into the future. H.R. McMaster may not know Joe Byerly or Travis Johnson, but he has *influenced their development. With this 3GL vision in mind, think of a leader whom you are developing. What are you doing, intentionally and with purpose, to be a catalyst for his or her development?*

Picture the leaders that he or she is influencing now and will influence in the future. Visualize the ripple effect. And don't leave it to chance that this person will understand what you are doing in terms of leader development. Explain it. Put it into context. And then keep at it—be consistent and keep coming back to this ongoing, never-ending conversation about leader development and becoming more effective. In the process, you will ignite a passion and deep commitment to developing leaders—in yourself and in those you lead. Your greatest legacy will be the leaders that your leaders equipped and inspired to live this vision everywhere they go.

One way to start on this path is to print a copy of this article as well as the June 2007 "3GL" article in ARMY Magazine and then to sit down and talk about it with one or more people. And if you are a commissioned officer, please join the ongoing conversation in the CompanyCommand forum (http://CC.army.mil) where we are collectively growing the profession with this 3GL mind-set.

AUSA Sustaining Member Profile

Safran USA

Corporate Structure—President and CEO: Peter Lengyel. U.S. Headquarters: 2300 Clarendon Boulevard, Suite 607, Arlington, Va. 22201. Telephone: 703-351-9898. Website: www.safran-na.com.

The Safran Group is a leading international high-technology group and a tier-one supplier of systems and equipment for aerospace, defense and security. Operating worldwide, the Group has more than 58,000 employees and in 2010 generated sales of $15.1 billion. Through its global presence, the Safran Group not only enhances its competitiveness but also builds industrial and commercial relations with the world's leading prime contractors and operators, while providing fast local service to customers around the world. Working alone or in partnership, Safran holds international leadership positions in each of its core markets.

In the United States, with more than 6,500 employees (including joint ventures) across 31 companies and joint ventures, 22 states and more than 56 locations, Safran USA operates in the Group's three principal sectors—aerospace, defense and security—and DoD programs, research and development, and corporate citizenship.

Aerospace

Safran is a world-class manufacturer of aerospace propulsion systems and aircraft equipment such as landing and wiring systems. Through subsidiaries such as Snecma, Messier-Bugatti-Dowty and Turbomeca, the Group provides its civilian and military customers with high-technology solutions for the propulsion of airplanes, helicopters, missiles and launch vehicles, and aircraft systems and equipment.

Safran designs, develops, tests, produces and supports aerospace propulsion systems and aircraft equipment, which it markets worldwide. The CFM56 engine, for example, is the product of an equal joint venture with GE that began in the 1970s and was recently extended to 2040. With more than 20,000 engines delivered to date for both civilian and military applications, the CFM56 is the best-selling engine in the history of aviation. As a major player in fielding and supporting today's leading aerospace programs, Safran operates through a number of companies, alone or in partnership with other industry leaders.

Defense

A recognized leader in optronics systems and equipment, the Safran Group develops and markets gyro-stabilized pods, sights, periscopes, infrared cameras, multifunction binoculars and many other leading-edge products through its subsidiaries Sagem, Vectronix and Optics-1. The company also offers a complete range of world-class inertial navigation systems that are used on military transport and combat aircraft, helicopters, warships, submarines, armored vehicles and artillery systems. As a top-tier supplier to armies, navies and air forces around the world, the company offers a number of advanced solutions for the digital battlefield: soldier modernization programs, vehicle digitization, encryption, communications systems, tactical unmanned aircraft systems and more.

Security

Safran companies offer a range of security solutions across three main market segments: identification, secure documents and detection. With the recent acquisitions of GE Homeland Protection, Printrak and L-1 Identity Solutions (now known as Morpho Detection, MorphoTrak and MorphoTrust USA), Safran boasts a true global presence and comprehensive range of security solutions. Safran is the world leader in multibiometric identification technologies (fingerprint, iris, facial and vein recognition) and a major player in explosive detection systems and smart cards, resolving the emerging security requirements for individuals, businesses and nations. Deployed in more than 100 countries, these integrated systems ensure the security of transport, high-value facilities, secure personal identification and civilian protection.

Safran and DoD

Safran contributes to numerous Department of Defense programs and has done so for nearly four decades. Examples include Turbomeca Adour jet engines for T-45 Goshawk trainers; Messier-Bugatti-Dowty brakes and landing gear for KC-135 tankers, C-17 airlifters and F/A-18E/F Super Hornet fighters; Turbomeca Arriel 2 engines; Sagem avionics; Labinal wiring for the U.S. Army's UH-72A Light Utility Helicopter (LUH); and Labinal wire harnesses and electromechanical assemblies for the CH-47 Chinook cargo helicopter. Safran's commitment to the U.S. Army customer is further reflected in the fact that the company has expanded its existing U.S. facilities and built new facilities in support of the LUH program.

Safran enjoys an equally prominent role in the North American civil aviation market, with a customer list that includes all major airplane and helicopter manufacturers: Boeing, Bombardier, Gulfstream, Cessna, Lockheed Martin, Sikorsky, American Eurocopter and Bell. Likewise, nearly all airlines in North America choose Safran's engines, nacelles, electronic power controllers, wiring, wheels, carbon brakes and landing gear to equip their fleets.

Focus on the Future

In order to maintain its competitive advantage, Safran's strategy is one of constant innovation. With footholds in diverse markets, the Group ensures its role as a key business leader through strong investment in research and development, both in personnel and funding. Indeed, Safran invests over 11 percent of its annual revenue and 20 percent of its workforce in research and development activities that benefit its customers and end users alike. As a result, recent major developments have included more electric aircraft systems; new aircraft propulsion solutions with significant reductions in carbon dioxide, nitrogen oxides, noise and fuel consumption; advanced composite materials for both engines and equipment; and next-generation inertial navigation systems for air, sea and land.

Corporate Citizenship

The Safran Foundation supports programs in the United States that align with the Group's dedication to empowerment and opportunity. As a result, Safran is proud to sponsor the Duke Ellington School and a series of concerts and other arts performances throughout the United States. In addition, Safran's companies participate in local charitable events that benefit health and educational causes in their respective communities.

DEFENDING MORE.
COSTING LESS.

360-DEGREE COVERAGE. NO GAPS. NO BLIND SPOTS.

On November 17, 2011, MEADS successfully conducted the first-ever 360-degree launch by an air and missile defense system – proving that only MEADS can provide our warfighters with the protection they urgently need. With the increase in ballistic and cruise missile threats, MEADS' advanced capabilities detect, track, and intercept today's threats from any direction with eight times the defended area of Patriot. Defending more and costing less than Patriot, MEADS covers it all.

meads-amd.com

MEADS INTERNATIONAL, INC

Soldier Armed

Scorpion I/Scorpion II Unattended Ground Sensor

By Scott R. Gourley

An early April 2012 announcement highlighted a recent U.S. Army procurement award to provide Scorpion I and Scorpion II unattended ground sensor (UGS) systems to protect soldiers with a remote, persistent, unattended surveillance capability for improved situational awareness and actionable intelligence.

According to Jack Wolford, manager of business development for Northrop Grumman Electronic Systems Xetron campus in Cincinnati, Ohio, Scorpion is best described as "a persistent, autonomous surveillance system for force protection and intelligence gathering."

"We got into this business 13 years ago, starting in 1999 with a DoD customer," Wolford said, "and the challenge that DoD customer faced in his inventory was with myriad unattended sensors that were all 'stovepiped.' They weren't part of an integrated network. So Northrop Grumman stepped up, with the help of the U.S. government, and we developed what we call a universal communications gateway. We integrated the sensors and communications links that this DoD organization was fielding at that point in time. Then, over the last 13 years, we have grown this system to integrate with more than 50 different sensors and 18 different communications links, with those sensors and communications links coming from other manufacturers as well as those that we develop here at Northrop Grumman."

The Scorpion system gateway is linked to a series of day- and night-vision electro-optic (EO), infrared (IR), seismic and magnetic sensors to provide secure, two-way, beyond-line-of-sight communications for around-the-clock global surveillance of time-critical targets.

"So the heart of the system is a 'sensor and communications link-agnostic gateway,'" he added, "but at the end of the day what that really provides our warfighter is actionable intelligence.

"The warfighter did have existing capabilities [prior to Scorpion]. What we brought to the table was a more autonomous 24/7 surveillance system that would operate off batteries for long periods of time. For example, a typical mission life for a Scorpion system is in excess of six months."

In terms of tactical capabilities, manufacturer descriptions credit the EO and IR sensors with providing persistent data and imagery to enable target classification, identification, GPS location and actionable intelligence for targets up to 800 meters away.

Characterizing Scorpion as a force multiplier, Wolford said, "As we draw down overseas in the CENTCOM AOR [U.S. Central Command area of responsibility] and our warfighters thankfully get to come home, there are times when surveillance will still be required, whether it's for border security or protection of the remaining forces. These systems can be left behind to operate autonomously 24/7 to look for, detect and then notify decision makers of nefarious activity."

Initial prototypes were delivered in 1999 with the first production lot of a "Scorpion predecessor" (which Wolford declined to name) taking place in the 2000 time frame.

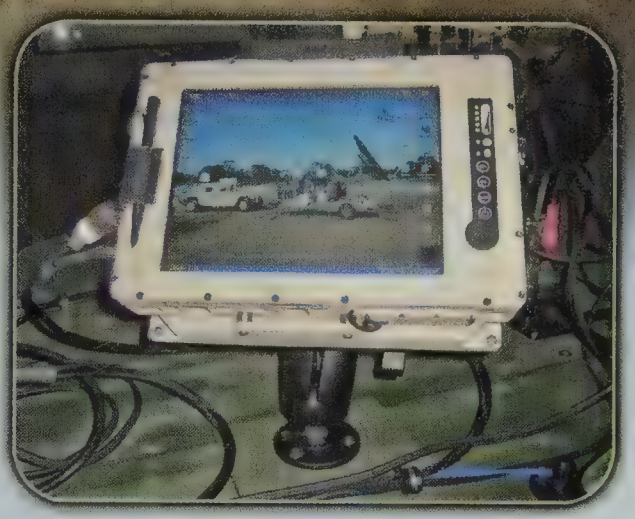
"The award for the first large production buy of Scorpion I occurred in 2005 with deliveries starting in 2006," he said, pointing out that those Scorpion I systems "went to the CENTCOM AOR but were procured by an-

Northrop Grumman

The Scorpion I unattended ground sensor provides improved situational awareness and actionable intelligence for targets up to 800 meters away and runs on batteries for up to six months. The next generation, Scorpion II (below), incorporates new technologies that improve performance.

Northrop Grumman

RAM® MILITARY MOUNTS



Contractors who trust RAM®

NORTHROP GRUMMAN

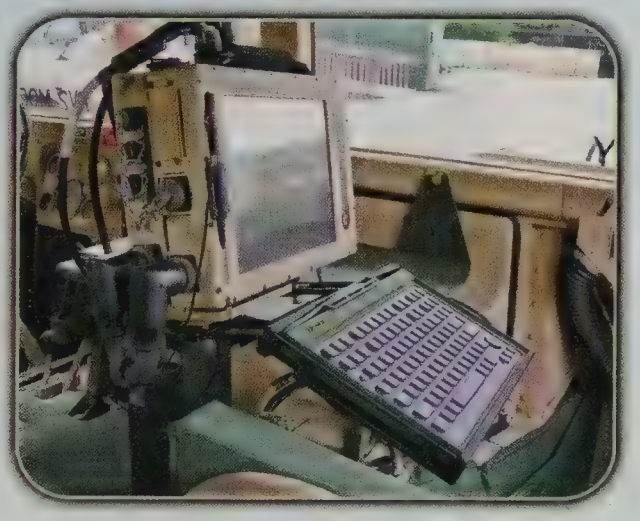
Raytheon

LOCKHEED MARTIN

Rockwell Collins

TRW

DRS TECHNOLOGIES



THE RAM® MOUNT ADVANTAGE

RAM® Shock Absorbing Mounts Protect Electronics for Improved Reliability
Field Proven for Over 15 Years
Made in the USA
Lifetime Warranty

WWW.MILITARYMOUNT.COM

National Products, Inc. | Address: 8410 Dallas Ave. S., Seattle, WA 98108
Phone: (206) 763-8361 | Fax: (206) 763-9615
Website: www.ram-mount.com | Email: sales@ram-mount.com

Scott R. Gourley

Members of 2nd Brigade, 1st Armored Division at Fort Bliss, Texas, train concealing and emplacing Scorpion I sensors prior to Network Integration Evaluation 11.2 at White Sands Missile Range, N. M., in May 2011.

other DoD entity on behalf of the U.S. Army."

Wolford said that the competitive 2005 award covered 665 systems, "which pushed … total awarded systems [including predecessor systems] for ultimate fielding to close to 1,000. Today we have more than 1,000 systems delivered to DoD and the intelligence community."

Delivery of those systems was also accompanied by continuing refinement and enhancement of many of the design features, leading to the development of the new Scorpion II system that was included in the April 2012 announcement.

"Scorpion II brings a 50 percent reduction in size and weight as well as power," Wolford said. "As part of that, the imagers, which operate 24/7, are smaller and have improved resolution [doubled from legacy 320x240 to 642x492]. In addition, we added enhanced capability, known as passive infrared, to a seismic/magnetic sensor.

"Scorpion II also brings wireless capability," he continued. "The main advantage there, of course, is that wireless permits the warfighter to optimize the emplacement location of these sensors, depending on the mission and the surrounding environment.

For example, they might be in Afghanistan, down in a valley, where they don't necessarily have an unobstructed view of the sky. With the new design, the sensors could be down in the valley, monitoring a particular area of interest. The communications gateway could reside on a hilltop, however, where it would have an open view of the sky for whatever the warfighter happens to be using for communications at that time. By contrast, in years past, when everything was cabled, you would have to put the entire system either down in the valley or up on the hilltop and farther away from the target area of interest."

Asked about planned program activities during the remainder of fiscal year (FY) 2012 and during FY 2013, Wolford said that the initial Scorpion II units covered under the new contract will be delivered "to a DoD customer" during the summer of 2012.

Although the recent indefinite delivery/indefinite quantity (IDIQ) contract covers a five-year period up to 2017, Wolford said that the initial taskings under the award "will be wrapped up by early FY 2013."

"The Army has some additional development that they would like us to perform," he said. "We do not have that award today, but when it arrives it would be awarded under the auspices of the [April 2012] IDIQ contract."

Outlining some of the aspects of that additional development effort, he said, "The government actually has another architecture with which it would like us to be compliant—that would further expand and broaden Scorpion's network capabilities. So at least the plan is for the government to fund us to be compatible with that network."

"We've been doing the unattended ground sensor systems for 13 years and counting," Wolford concluded, "and warfighters depend on these systems for actionable intelligence. Our continued investment has led to [Scorpion II] systems that are both lower SWAP [size, weight and power] and wireless, enabling these sensors to be more optimized in terms of their emplacement and giving greater flexibility in terms of mission sets. So the warfighter can benefit from these systems in many different ways, depending on whether it's a force protection mission, an intelligence gathering mission or a surveillance mission, and since they operate 24/7 they provide that intelligence without necessarily needing boots on the ground and placing the warfighter's life in harm's way." ★

Reviews

A Panorama of Opinions on Afghanistan

Afghan Endgames: Strategy and Policy Choices for America's Longest War. *Edited by Hy Rothstein and John Arquilla. Georgetown University Press. 229 pages; index; $29.95. Publisher website: www.press.georgetown.edu.*

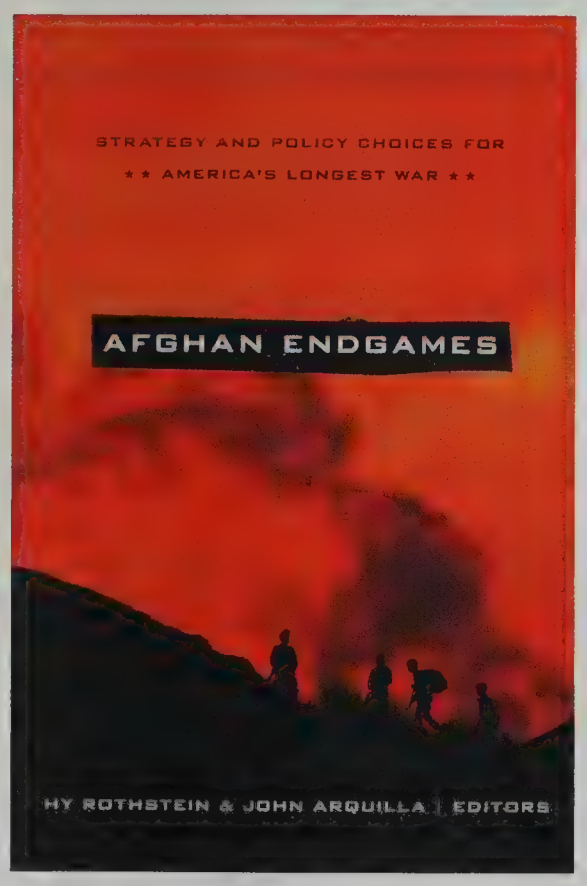
By COL Gregory Fontenot
U.S. Army retired

Ideally, reviewers should drive from their minds any preconception they may have about either the arguments or conclusions reached in the object of a review. Anyone reading this review will see immediately that I am unable to fully divest myself of emotion where Afghanistan is concerned. Afghanistan is a mystical and mysterious place for me and has been so since I first read of it nearly half a century ago.

In part, it fascinates because it sits astride the Silk Road, literally at the crossroads of empires. In this regard, it is as unfortunate as the Balkan countries. Armies tramp through these places more often than is helpful. Afghanistan is also hauntingly beautiful, running the gamut from pristine Alpine valleys to starkly beautiful deserts.

Yes, Afghanistan is exotic and beautiful, but everything that lives there is hard and lives by its wits. Sipping coffee one morning last fall, I watched one of the International Security Assistance Force's "domestic" cats slaughter a mourning dove with stunning rapidity and no wasted sentiment. Like Paul on the road to Damascus, I had an epiphany. The cat with her blood-smeared muzzle wolfing down the diminishing corpse of the dove is for me a metaphor for Afghanistan. The cat, the dove and the glorious panorama that is Afghanistan all influence this review.

Anthologies are difficult undertakings because they are quite literally books written by committee. The task that editors assume is tricky since they must attempt to define the scope planned for an anthology and then ensure coherence in the final draft. In *Afghan Endgames: Strategy and Policy Choices for America's Longest War*, Hy Rothstein and John Arquilla added to their difficulty by choosing a very diverse group of authors with whom to collaborate. To some extent, the result is that the anthology delivers what was promised but is not entirely coherent.



Endgames is broad to the point of lacking focus. So why read it? The primary rationale is because *Endgames* brings to the table four very good chapters on alternative strategies for Afghanistan. There are also well-crafted ideas running the gamut from historical analysis to managing the strategic communications during the endgame.

In the heart of *Endgames*, entitled "Strategic Alternatives," Andrew (Skip) Bacevich argues that the United States should pull out of Afghanistan now whereas Frederick W. Kagan points out various scenarios that make staying worthwhile. Edward N. Luttwak suggests a third option, which requires neither leaving immediately, as Bacevich proposes, nor staying much longer as Kagan implies may be necessary. Finally, Scott Sigmund Gartner and Leo Blanken offer a theoretical construct of what success, in the absence of victory, might look like. Also of interest are chapters by Victor Davis Hanson on the Greeks in Afghanistan and Russell Muirhead's argument on the moral obligations he asserts the United States has incurred in Afghanistan. Still, there is more that is worth reading beyond the few chapters mentioned here.

The history of Afghanistan, even when told by Victor Davis Hanson, leaves little to suggest that projects undertaken by westerners work out very well in the end. Hanson's chapter focuses on the two centuries that Greeks held sway in Afghanistan. Hanson argues convincingly that the Greeks dominated in most of Afghanistan with relatively few troops, but he admits they never really controlled the place. His chapter is fascinating on a number of counts but, above all, for the implications of the Greek sojourn: a few place names, some green-eyed Afghans, but what else remains of their culture or of their effort? The fact that the Greeks made so little impact on Afghanistan is reason enough to give pause. Hanson's piece suggests the Greek legacy is like that of Ozymandias—a few artifacts and those hard to find. What does that say for the influence of the United States over the long term?

Russell Muirhead's chapter, "The Ethics of Exit: Moral Obligation in the Afghan Endgame," raises troubling questions about what might happen as the United States draws down. He reaches more than a few with the notion that the war in Afghanistan should be examined ethically from the view of *jus post bellum*. Muirhead takes what he describes as a minimalist view of what *jus post bellum* advocates believe should be considered in assessing the morality of any war. Frankly, this is the logical extension of

U.S. Army/SGT Daniel Schroeder

PFC Samuel Corsolini of the 25th Combat Aviation Brigade pulls security for his team and members of the 2nd Afghan National Civil Order Patrol as a UH-60 Black Hawk helicopter lifts off in Kandahar Province, Afghanistan, in March.

the American ethical thinking about war since the advent and, now, nearly overwhelming influence of, Dr. Michael Walzer's thinking. In the end, Muirhead's concern is entirely reasonable, at least emotionally. What is to become of the "good Afghans" who signed up for the program the United States advocated? The problem with his arguments is the issue of who decides what "good" looks like and how long after any war is long enough to decide. Muirhead reflects a growing body of opinion in the academy that could ultimately affect international law. Soldiers *should* read Muirhead and sample the maximalists he mentions. Although soldiers will not often agree with their thinking, reading the maximalist *jus post bellum* thinkers will foster a fuller understanding of the perils of the profession and the uncertainty of making war.

The section alluded to earlier on the strategic alternatives is the heart of this anthology. Bacevich argues with passion to the point of vitriol that the United States should leave Afghanistan immediately. He lists and discounts *à l'outrance* the arguments for staying. According to Bacevich, the war has no useful strategic purpose, has created no compelling moral obligation to Afghanistan and is being paid for by future generations. Bacevich is nothing if not certain, and he makes a strong case for his position.

By contrast, Kagan is far more measured and reasoned in making his case. Fundamentally, he claims that the United States has three abiding strategic interests in Afghanistan: precluding the terrorists from reestablishing safe havens in Afghanistan, influencing the Pakistani predilection toward supporting terrorists and not losing a war. Kagan comes across as analytical and unemotional, but one wonders how what he proposes can be done in less than what amounts to decades.

Luttwak's third way is interesting because it suggests that the United States should leave but can do so and manage the results partly because it is in the interest of others to take some of the load in Afghanistan. These "others" include China, Russia and even Iran. Most entertaining, he describes the nature of counterinsurgency in the United States as a "disembodied military cult." For those whose hackles are raised by Luttwak's thinking, it is helpful to recall how wrong he was in his estimates prior to Desert Storm. He is always provocative, but his ideas

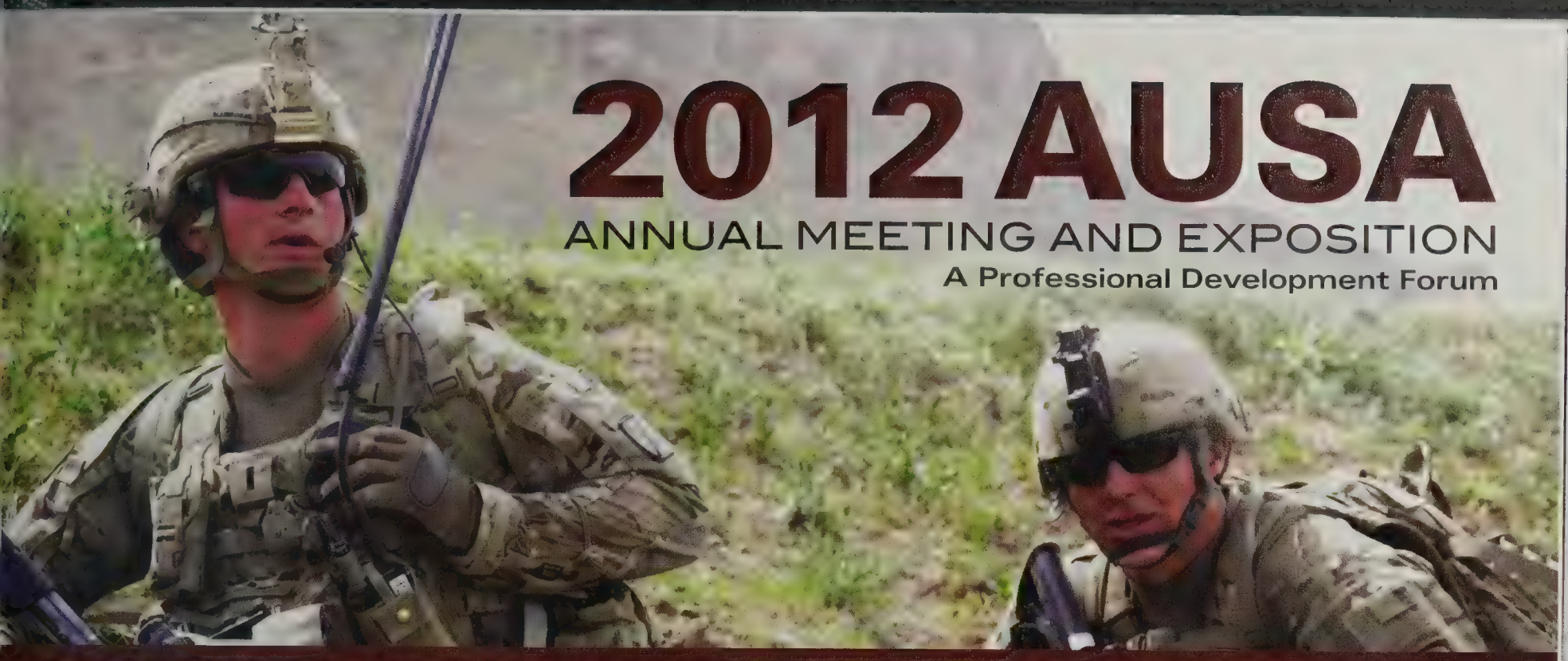
Save Time and Register Online

- Go to **www.ausa.org** and click on the small Annual Meeting image or the Annual Meeting link
- Fill out the registration form and click "Submit"
- Print your confirmation with your personalized bar code
- Bring this with your government-issued photo ID to the Registration Desk to pick up your badge

See you there!

OCTOBER 2012 • WASHINGTON, D.C.

ASSOCIATION OF THE UNITED STATES ARMY
2425 Wilson Boulevard • Arlington, VA 22201
(703) 841-4300 • (800) 336-4570 • www.ausa.org



2012 AUSA
ANNUAL MEETING AND EXPOSITION
A Professional Development Forum

22-24 OCTOBER 2012 • WALTER E. WASHINGTON CONVENTION CENTER • WASHINGTON, D.C.

2012 ADVANCE TICKET ORDER FORM

Advance ticket orders available to members only

ORDERS MUST BE RECEIVED BY 28 SEPTEMBER 2012

Advance ticket purchases with badges will be held for pickup at the Ticket Pickup Counter of the Walter E. Washington Convention Center.
A government-issued photo identification will be required for pickup.

SPECIAL NOTE: SEPARATE TICKETS ARE REQUIRED FOR EACH FUNCTION.
BADGES AS WELL AS TICKETS ARE REQUIRED FOR ADMISSION TO ALL FUNCTIONS.

Function	Quantity	Price	Amount
Guard/Reserve Breakfast (22 Oct.)	_____	$40.00	_____
President's Reception (22 Oct.)	_____	$50.00	_____
Eisenhower Luncheon (23 Oct.)	_____	$60.00	_____
Army Civilians' Luncheon (24 Oct.)	_____	$50.00	_____
Marshall Memorial Reception (24 Oct.)	_____	$45.00	_____
Marshall Memorial Dinner (24 Oct.)	_____	$95.00	_____

Payment must accompany this order • Please print or type
No refunds for ticket orders cancelled after **28 SEPTEMBER 2012**
Cancellation in writing only

Total Amount $ _____

Americans with Disabilities Act (ADA): Check here ❑ if you need special arrangements.

AUSA MEMBERSHIP NUMBER

RANK	FIRST NAME	INITIAL	LAST NAME	PHONE NO.
UNIT, CHAPTER, OR TITLE/COMPANY, ETC.				
ADDRESS (REQUIRED)			STATE ZIP	COUNTRY
FAX			E-MAIL	
GUEST NAME – PLEASE ATTACH SEPARATE SHEET FOR ADDITIONAL GUESTS				

PAYMENT BY: **❑ CHECK** **❑ VISA** **❑ MASTERCARD** **❑ AMEX**

CARD EXPIRES **MO.** **YR.**

SIGNATURE _____

www.ausa.org

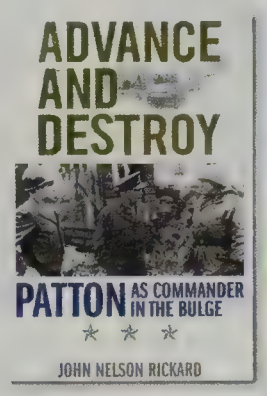
MAIL TO: Association of the United States Army
P.O. BOX 101560
Arlington, VA 22210-0860

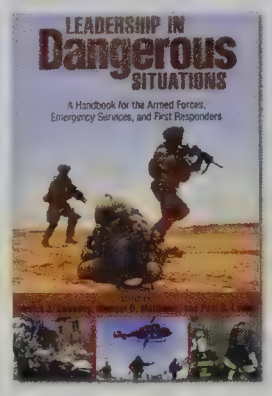
FAX TO: 703-243-2589

AUSA BOOKS

The AUSA Book Program offers quality military books about Army heritage, military theory and policy and military force in the modern world. This program permits AUSA members to purchase these and other books at a discount rate.

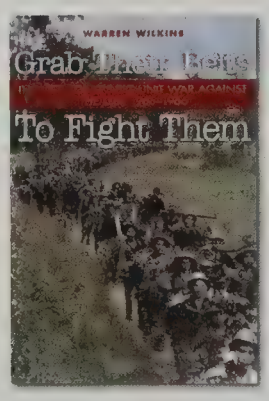
To order books, visit the AUSA website at **www.ausa.org** or contact Dr. Roger Cirillo at 800-336-4570 ext. 6653 or via e-mail at rcirillo@ausa.org.

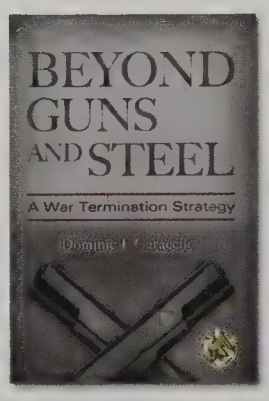




Advance and Destroy: Patton as Commander in the Bulge by John Rickard (University Press of Kentucky, September 2011)

Leadership in Dangerous Situations: A Handbook for the Armed Forces, Emergency Services, and First Responders by Patrick Sweeney (Naval Institute Press, August 2011)





Grab Their Belts to Fight Them: The Viet-Cong's Big-Unit War against the U.S., 1965–1966 by Warren Wilkins (Naval Institute Press, May 2011)

Beyond Guns and Steel: A War Termination Strategy by Dominic Caraccilo (Praeger Security Studies, January 2011)

The Quiet Professional: Major Richard J. Meadows of the U.S. Army Special Forces by Alan Hoe (University Press of Kentucky, August 2011)

Kontum: The Battle to Save South Vietnam by Thomas McKenna (University Press of Kentucky, August 2011)

Passing the Test: Combat in Korea, April–June 1951 by John Greenwood (University Press of Kentucky, September 2011)

Black Ops, Vietnam: The Operational History of MACVSOG by Robert Gillespie (Naval Institute Press, September 2011)

Chief of Staff, Vol. 1 and 2 by MG David T. Zabecki (AUS, Ret.) (Naval Institute Press, May 2008)

should be considered without rancor. Who knows? He might be right.

In their chapter "Beyond Victory and Defeat," Gartner and Blanken provide a useful framework for understanding that, although wars rarely end neatly, the confusion may be managed. They argue that the United States will not leave Afghanistan with a victory, that is, the United States will not have been able to "neutralize the Taliban, create a sustainable Afghan national government ... and tamp down regional instability." Their to-do list is too long, too hard and too expensive. On the other hand, the postwar environment can be managed in a way to produce what they describe as a dynamic but relatively stable postwar environment that need not spiral out of control as did the unstable post-World War I peace. They argue that wars almost always produce what they call "oscillating outcome," either stable or unstable. The exceptions they offer are few but include the postwar relationship between the United States and Japan, which went from being a hostile one to a long-term oscillating relationship that generally has been good for all involved. This may say more about the efficacy of unconditional surrender than of their model, but the idea of managing outcomes as opposed to attempting outcomes that are likely unattainable or are beyond the price the market will bear is an interesting one. Gartner and Blanken's hypothesis is interesting and useful but as yet untested. For example, one of their proposals for operations in Afghanistan is to extend the village support operations effort. Just how that will play out—given the recent outrage in Afghanistan—is hard to see.

Endgames is almost panoramic in the views it offers, but it is not really coherent. Yet this diverse group of authors offers both irritating and stimulating ideas. That is what makes this anthology compelling. Only by considering any problem—and certainly Afghanistan—from more than one perspective and without resorting to dogma will we come to some understanding. With that we might find solutions.

***COL Gregory Fontenot**, USA Ret., commanded a tank battalion in Operation Desert Storm and an armor brigade in Bosnia. A former director of the School of Advanced Military Studies, he is coauthor of* On Point: The U.S. Army in Operation Iraqi Freedom *and is director of the University of Foreign Military and Cultural Studies.*

Varied Fare

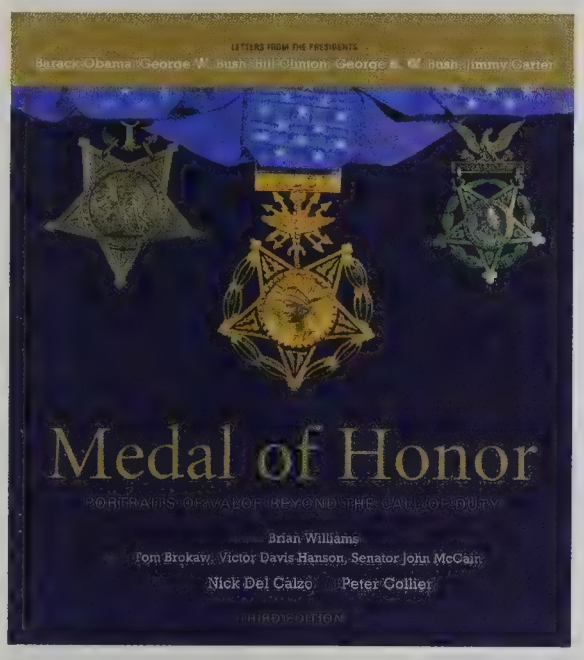
Medal of Honor: Portraits of Valor Beyond the Call of Duty. *Peter Collier. Artisan. 342 pages; black-and-white photographs; index; $45. Publisher website: www.workman.com/products/9781579654627.*

To pay homage to the Medal of Honor on its 150th anniversary, the Congressional Medal of Honor Foundation recently released a limited third edition of *Medal of Honor: Portraits of Valor Beyond the Call of Duty.* The book includes a detailed history of the Medal, messages from President Obama as well as four former Presidents, and informative profiles on more than 100 recipients (including two living recipients from the conflicts in Iraq and Afghanistan) and detailed accounts of the acts of valor that earned them the Medal. The book also includes a DVD that features recipients telling their stories.

Those interested in the history of the Medal of Honor will appreciate this book's introduction, "From the Civil War to Today: A 150-Year History," which reveals some fascinating—and perhaps little-known—facts about the changes the Medal has undergone. Although the conditions for receiving the Medal are now quite strict—only servicemembers who risk their lives beyond the call of duty may receive it—in its early days it was occasionally awarded for reasons that had nothing to do with bravery. For example, it was once awarded during the Civil

War to every soldier in a Union infantry regiment—more than 800 men—merely as an incentive to reenlist. At other times it was awarded to civilians. Still others received the Medal by regular mail simply by making written requests containing claims of bravery that were never verified. These conditions gradually became more stringent over the years, so that those who now receive the Medal must have displayed heroism in combat, their valor must be established by at least two eyewitnesses, and review is required at all levels of command, including the President.

The profiles of the recipients of the Medal of Honor, which make up the bulk of the book, are equally engaging, presenting individuals from a variety of ethnic backgrounds, walks of life and military ranks, from World War II to the current war on terrorism. Each profile is laid out on two facing pages: a full-page, contemporary photograph of the recipient and on the opposite page a detailed description of the historical events surrounding the recipient's act of valor, including brief biographical information as well as a picture of the servicemember taken at or around the time the Medal was awarded.



Both casual readers and history buffs will find *Medal of Honor: Portraits of Valor Beyond the Call of Duty* a valuable resource containing fascinating information about this long-revered American military honor.

—Jeremy Dow

Ataturk: Lessons in Leadership from the Greatest General of the Ottoman Empire. *Austin Bay. Palgrave Macmillan. 202 pages; black-and-white photographs; maps; index; $23.00. Publisher website: http://us.macmillan.com/ataturk/AustinBay.*

A well-written and fast-paced addition to the new World Generals Series, *Ataturk: Lessons in Leadership from the Greatest General of the Ottoman Empire* is a study of the life of Mustafa Kemal Ataturk, the inspirational military leader and political visionary who created the modern nation of Turkey.

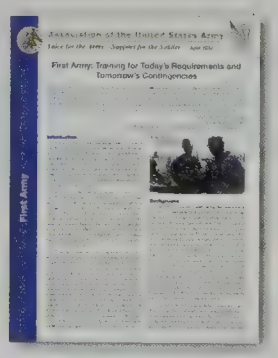
Expressing a strong military ambition from an early age and demonstrating his leadership prowess in regional conflicts preceding World War I, Ataturk stepped onto the global stage in 1915 as a lieutenant colonel whose 19th Division held the high ground and blunted the initial inland advance of the Australian and New Zealand Army Corps (ANZAC) at Gallipoli. His command abilities were recognized and reinforced over the following days until he and his divisional headquarters

PUBLICATIONS
from the Institute of Land Warfare

Defense Reports
- DR 11-4 – Unleashing Unlimited Potential: The Army Warrior Care and Transition Program in 2011 (October 2011)[1]
- DR 11-3 – Network Integration Evaluations: Developing Technologies with the Army's Industry Partners (October 2011)[1]

Landpower Essays
- LPE 11-2 – Laying the Groundwork for the Army of 2020 by General Robert W. Cone (August 2011)[1]
- LPE 11-1 – First with the Truth: Synchronized Communications in the COIN Fight by Richard D. Hooker, Jr. (August 2011)[1]

Land Warfare Papers
- LWP 87 – Historical Lessons Applied to the Current Technical Revolution in Military Affairs by Major Benjamin Huebschman (March 2012)
- LWP 86 – Applying Natural System Metaphors to the Force Modernization Process by Colonel K. Todd Chamberlain (February 2012)[1]
- LWP 85 – A Case for Human Dimension Training: Decision Science and Its Potential for Improved Soldier Resilience and Decisionmaking at Every Level by Colonel Kevin M. Felix (October 2011)[1,4]



National Security Watch
- NSW 12-2 – The Rationale for a Robust U.S. Army Presence in the Pacific Basin by Nicholas Krueger (March 2012)[1]
- NSW 12-1W – Thinking About the 21st Century Security Environment: The Need for a Whole-of-Government Approach by General Gordon R. Sullivan, USA Ret. (January 2012)[2]

NCO Update
- Budget Cuts Affect NCOs' Reenlistment Opportunities[3] (2nd Quarter 2012)[1]
- Tax Credits to Benefit Veterans Signed into Law[3] (1st Quarter 2012)[1]
- Three NCO Leaders Honored with Strickland Award[3] (4th Quarter 2011)[1]
- New NCO Promotion Points System Instituted[3] (3rd Quarter 2011)[1]

Special Reports
- AUSA + 1st Session, 112th Congress = Some Good News (January 2012)[1]
- Fiscal Year 2012 Army Budget – An Analysis (October 2011)[1]
- Profile of the U.S. Army 2010: a reference handbook (July 2010)[1]
- Your Soldier, Your Army: A Parents' Guide by Vicki Cody (also available in Spanish)[1]

Torchbearer National Security Reports
- The U.S. Army Squad: Foundation of the Decisive Force (October 2011)[1]
- U.S. Army Training for Unified Land Operations (September 2011)[1]

Torchbearer Issue Papers
- First Army: Training for Today's Requirements and Tomorrow's Contingencies (April 2012)
- Third Army: Empowering Theater Responsiveness by Synchronizing Operational Maneuver (March 2012)
- U.S. Army North/Fifth Army: Building Relationships for a Secure Homeland (December 2011)[1]

Torchbearer Alerts
- Breaking the Faith (February 2012)[1]
- U.S. Army Retirees: Retired Pay and Health Care at Risk (September 2011)[1]

All publications are available free of charge at:
www.ausa.org/publications/ilw

To order these and other ILW publications, visit the Institute of Land Warfare at the AUSA website (www.ausa.org); send an e-mail to **ILWPublications@ausa.org**; call (800) 336-4570, ext. 4630; or write to AUSA's Institute of Land Warfare, ATTN: Publication Requests, 2425 Wilson Boulevard, Arlington, VA 22201-3326.

[1] Available on AUSA website at www.ausa.org/ilw.
[2] Available ONLY on AUSA website at www.ausa.org/ilw.
[3] Lead story.
[4] Winner of the 2011 AUSA/Army Capabilities Integration Center (ARCIC) writing contest

were soon performing the ad hoc command of a corps-sized formation.

As Austin Bay notes, although the battle at Gallipoli lasted just 259 days from the initial invasion to the final withdrawal of ANZAC elements, it "served as a military and political leadership laboratory for post-World War I and post-Ottoman Turkey." Indeed, Ataturk's military reputation was one of the most noteworthy byproducts of that event and was recognized by promotions and command in the battles of eastern Anatolia and Palestine from 1916–1918.

In addition to his frequent acts of battlefield bravery, instances of Ataturk's leadership success can be found in his understanding and use of information operations through his application of the power of the telegraph as a weapon. In fact, his frequent and successful exploitation of this particular communications technology, coupled with his own growing network of influence, resulted in both tactics and strategies that are still embraced today.

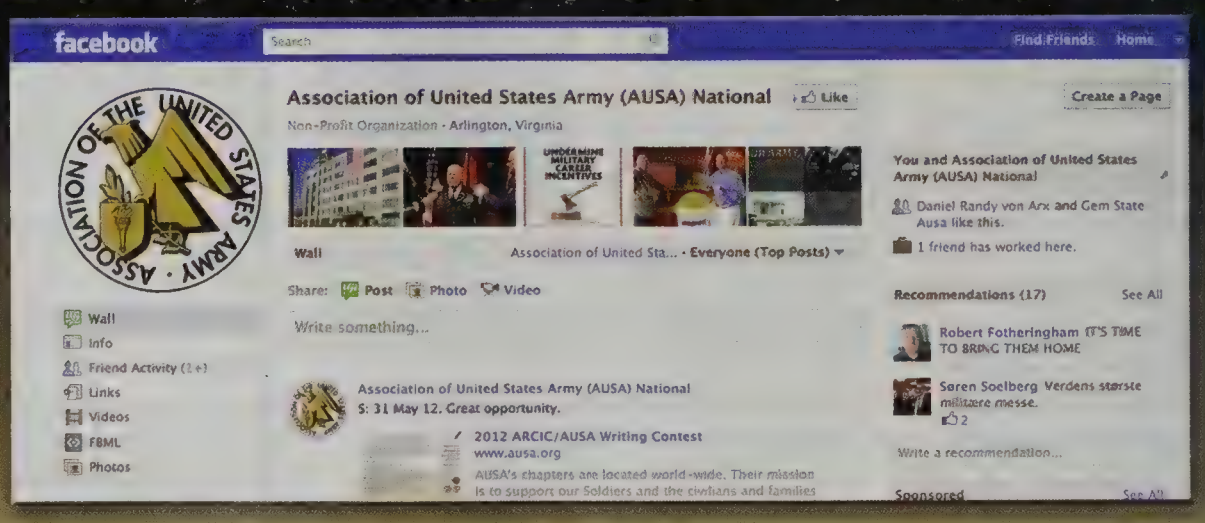
The strategic synergies are most evident in the years following World War I, when long-simmering nationalistic

movements like the "Young Turk Movement" were rekindled into the fervor of Turkey's War of Independence, which is generally marked from May 1919 to July 1923. (Greece and Turkey signed the armistice in October 1922.) The war is seen in three military/political phases with the final phase, August 1921–September 1922, overseen by Ataturk as commander in chief of the Turkish armed forces.

While the bulk of the book primarily focuses on Ataturk's military career, it also covers his true legacy, helping to guide the political and cultural revolution that followed Turkey's War of Independence. One significant cultural change occurred in 1934, when surnames became compulsory in an effort to simplify record keeping (and produce a comprehensible phone book). Kemal chose the last name Ataturk, meaning "father of Turks"—a fitting choice. From political freedom for women to Latinizing the Turkish script to a unified education system with "secular, Turkish-language schools," Mustafa Kemal Ataturk established a modernization pathway that led to the new Republic of Turkey.

—Scott R. Gourley

AUSA is on Facebook



Association of the United States Army (AUSA) National

Go to the AUSA website: www.ausa.org

Click on Find us on Facebook *at the bottom of the page.*

If you have a Facebook page, become an AUSA "friend."

To become a friend, you must have a Facebook account.

Historically Speaking

The War of 1812 at 200

By BG John S. Brown
U.S. Army retired

June 18 marks the 200th anniversary of the U.S. Senate's approval of a declaration of war against Great Britain. Many speak of the War of 1812 as our "second war for independence," with good reason. Given all that has happened since, it can be difficult to perceive how tenuous our national posture was at the time. Issues at stake were sustained economic subservience, the right to naturalize citizens upon whom growth through immigration depended, collusion to restrict the westward advance of American settlement and the general bullying of a newly independent nation by a superpower with worldwide concerns.

With annual government revenues of 70 million pounds, Great Britain was easily the dominant global commercial power. Her nearest competitor, France, garnered less than half as much, and other European nations trailed far behind. The U.S. government enjoyed revenues of perhaps 4 million pounds. Much of this was tied to trade with Great Britain, into whose economic orbit the United States readily fell. American cotton sold to British mills, for example, had multiplied more than fiftyfold in 20 years to 55 million pounds. Other American trade was similarly inter-dependent.

Great Britain's Royal Navy ruled the waves, having crushed Continental rivals at Trafalgar in 1805 and deploying 175 mighty ships of the line and more than 600 vessels overall. The United States' subordinate economic relationship could have remained benign, had not the vagaries of the Napoleonic Wars led the British to virtually prohibit trade with anyone controlled by France—which came to represent most of Europe and associated colonies. Adherence to British Orders in Council would have left the United States a mere neocolonial commercial appendage, with no options for independent commercial development. Understandably, Americans bucked the Orders in Council in favor of their emerging vision of neutral rights.

British enforcement of their Orders in Council led to contentious confrontations with and seizures of American merchant vessels. As grating as these were, the sting was soon surpassed by the issue of impressment. The Royal Navy required 140,000 sailors to sustain it, and not all were volunteers. To fill out crews, the Royal Navy relied upon impressment, an early and often haphazard and brutal form of conscription. Great Britain did not effectively recognize the right of individuals to change their citizenship and saw no ethical dilemma in impressing sailors born in Great Britain off of American vessels. Indeed, they often characterized them as deserters. Many sailors on American ships had been born outside the United States. The concept of a naturalized citizen was an essential element of American political philosophy and of aspirations for further growth through immigration. To their credit, the British tended to release seamen who could somehow prove they were born American. The snatching of sailors off of American vessels nevertheless provoked outrage, regardless of birthplace. Sentiments were particularly acute in American communities of Irish descent, who provided many sailors and had no great love of England.

Impressment, the British practice of conscripting British-born seamen from American vessels, bolstered the British navy and became an increasing source of conflict between the two nations.

Pressed on their maritime frontier by Orders in Council and impressment, Americans considered themselves beleaguered on their western frontier as well. The borders with British Canada and Spanish Florida were porous and impossible to control. Restive American Indians demonstrated increasing organization and sophistication in resisting the advance of American settlers. The Indians undoubtedly procured weapons, equipment and supplies from the British and Spanish. The extent to which this was the result of official policy is a matter for debate, but certainly the British sympathized with Indian efforts to curtail the expansion of the United States. Indian leaders such as Ten-

Library of Congress

Native Americans, such as the Shawnee chief Tecumseh, who fiercely resisted American settlement of the western frontier, found sympathetic patrons in Great Britain and Spain. The battles of the War of 1812 culminated with the Battle of New Orleans at Chalmette Plantation (below).

Library of Congress/Carol M. Highsmith

skwatawa, Tecumseh and Menawa raised coalitions and proved to be formidable opponents. The eventual construction of a large "neutral" Indian state in the Old Northwest remained an objective of British diplomacy throughout the war. This state was, of course, to be constructed within the boundaries of the United States as they had existed since 1783. It is small wonder that American settlers beyond the Appalachians demonstrated an intrinsic hostility to Great Britain.

Caught in a vice between British maritime policies and British frontier policies, Americans found it even more galling that their concerns roused little interest in London. American sensibilities received little priority, as Great Britain was locked in a gigantic contest with Napoleonic France to which all other concerns were subordinate. The United States was distant, thinly populated and peripheral. It had a minuscule army and navy, and a militia system that was virtually nondeployable. It could threaten equally peripheral Canada, but only if it could get its act together to overcome vast distances. The American coastline was hopelessly exposed and the Americans themselves seemingly divisible. Surely southerners would still want to sell their cotton, and other exporters to Great Britain would still want to continue their profitable ventures. More than 50 percent of American exports went to Great Britain. This seemed to offer ample lines of cleavage within the United States and ample reason to expect the United States to overlook minor outrages. In short, the fledgling United States received little respect in London.

In fact, the War of 1812 *was* a second war for independence. The United States would suffer defeats and secure victories but in the end would assert itself on both land and sea. Iconic battles such as the Thames (1813), Chippewa and Lundy's Lane (1814), and New Orleans (1815) would do much to shape the eventual result. We will explore these in due course.

The genesis of the war may bear some reflection as well. Two nations that had every economic and pragmatic reason to get along went to war because of the priorities and indifference of the one, and the aspirations and sensitivities of the other. We are now the superpower. We should remain careful not to treat others now as Great Britain treated us then. ★

BG ***John S. Brown****, USA Ret., was chief of military history at the U.S. Army Center of Military History from December 1998 to October 2005. He commanded the 2nd Battalion, 66th Armor, in Iraq and Kuwait during the Gulf War and returned to Kuwait as commander of the 2nd Brigade, 1st Cavalry Division, in 1995. He has a doctorate in history from Indiana University. His book,* Kevlar Legions: A History of Army Transformation 1989–2005, *was published in 2011.*

Recommended Reading:

Hickey, Donald R., *The War of 1812: A Forgotten Conflict* (Urbana: University of Illinois Press, 1989)

Horsman, Reginald, *The Causes of the War of 1812: National Honor or National Interest?* (Huntington, N.Y.: R.E. Krieger, 1976)

Mahon, John K., *The War of 1812* (New York: Da Capo Press, 1991)

SPOTLIGHT:

Global Tracking Solutions

- Secure asset visibility with real-time intrusion event detection
- Continuous global coverage
- Tailored reporting, remote configuration and upgrades
- Communicates securely through encrypted data
- Sensors monitor temperature, humidity, shock, motion, light & acceleration

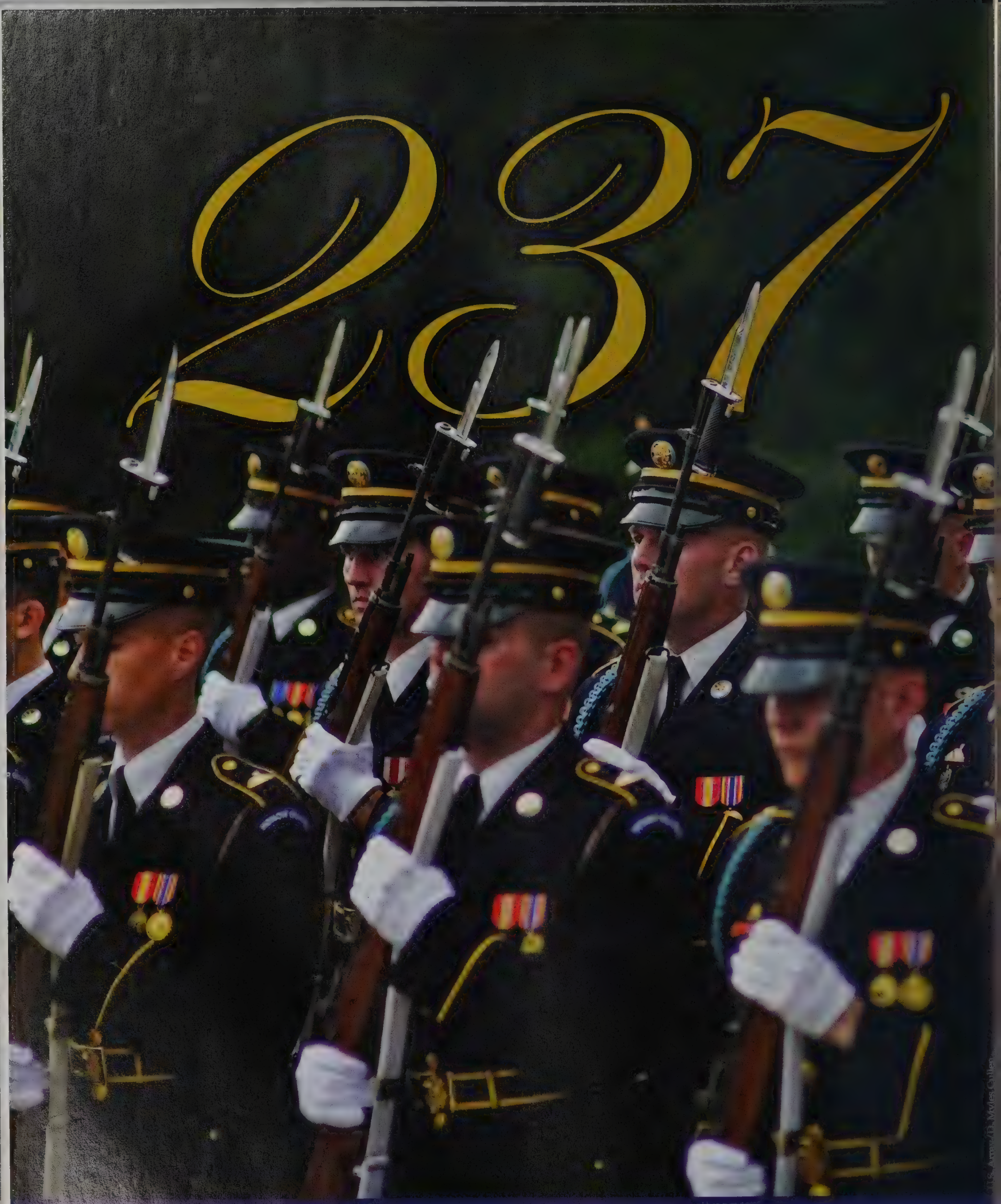
FIRST IN INNOVATION

Customers around the world rely on Cubic Global Tracking Solutions to deliver asset visibility and monitoring systems for situational awareness, logistics intelligence and intrusion detection. Cubic Global Tracking Solutions provides customers the technology, solutions and support needed to fight, win and return.

CUBIC
www.cubic.com

1919 Gallows Road, Suite 900 • Vienna, VA 22182 • 850.872.7099

237



AUSA Congratulates the Men and Women
Of the United States Army
On its 237th Birthday, June 14, 2012

©2012 AM General LLC

INTELLIGENCE IN REAL-TIME TO THE FRONT LINE.

The U.S. Army's Enhanced Medium Altitude Reconnaissance and Surveillance System (EMARSS) will provide combat units in austere locations with direct, actionable, near real-time intelligence. Selected by the Army, the Boeing EMARSS solution brings together a new-generation platform and the most advanced, modular ISR systems to accommodate a broad range of missions—unmatched capability to help ensure ground units every possible advantage.

BOEING

The Magazine of the Association of the United States Army

ARMY

July usa.org $3.00

Education Periodicals PERIODICAL
[non-circulating]
355.05 UNC
v. 62, no. 7 (2012)
A

**********AUTO**ALL FOR ADC 604
11639 20130531 20120701
ACQUISITONS DEPT.C02323592 0001
ACQUISITONS DEPT.C02323592 001795
1408 W GREGORY DR P00007
URBANA IL 61801-3607 01:026056

THE APACHE ADVANTAGE: ALWAYS MISSION READY.

AH-64D Apache Block III delivers multi-mission superiority you can rely on mission after mission. On-cost and on-schedule, the newest Apache builds upon its long-standing reputation for reliability with innovations that significantly extend the life of critical components and reduce lifecycle costs—because being always ready is a critical advantage.

BOEING

ARMY

MAGAZINE

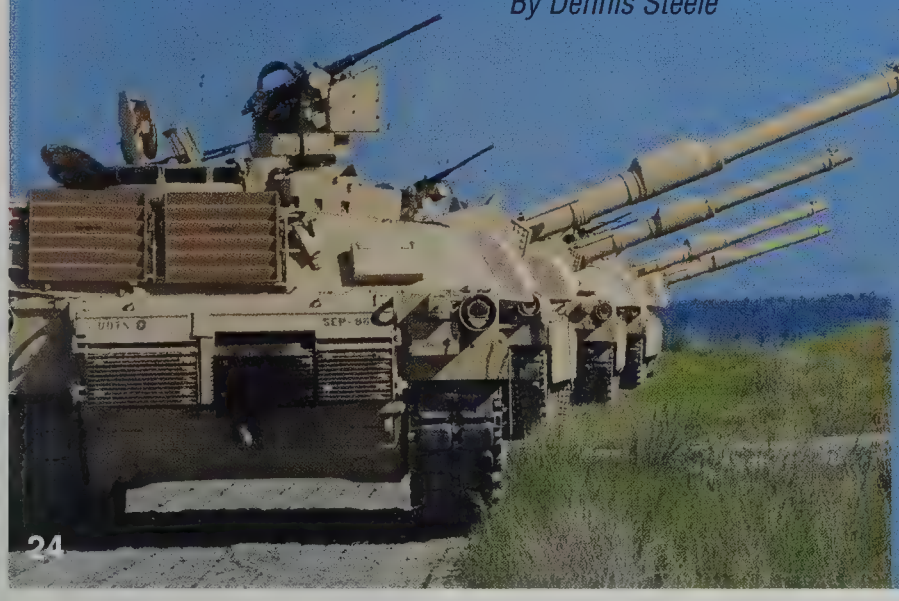
JULY 2012
VOL. 62, NO. 7

PUBLISHED BY THE ASSOCIATION OF THE U.S. ARMY

www.ausa.org

FEATURES

Best Army Tank Crew: The Sullivan Cup Tanker Competition Aims at a Bigger Target
By Dennis Steele



An inaugural four-day event at Fort Benning, Ga., tested competing tank crews to select the Army's best with the goal of increasing proficiency throughout the Armor Corps. ***Page 24***

At the Tip of the Spear: Mission Command on the Move in a Networked Force
By COL Michael S. Higginbottom and LTC Richard Adkison, USA Ret.
Despite the Army's progress in providing mission command-on-the-move capabilities to mounted and dismounted commanders, remaining challenges must be met to allow them to conduct the full range of responsibilities. ***Page 32***

The U.S. Army Warrant Officer Corps: Still a Work in Progress
By Dennis Steele
"Today, Army warrant officers are changing their corps and themselves through education and an expanded view of their responsibilities." ***Page 38***

Winfield Scott's Remarkable Lieutenants
By COL Cole C. Kingseed, USA Ret.
MG Winfield Scott's "little cabinet" of military advisors—junior West Point officers—helped one of America's most successful battlefield generals achieve "spectacular success in a campaign that most observers" believed was doomed from the start. ***Page 44***

FRONT & CENTER

History Lessons
By GEN Frederick J. Kroesen, USA Ret.
Page 17

Back to the Future: Retaining Reservists in an Era of Limited Funding
By COL Gary C. Howard, USAR Ret.
Page 18

The Loyal Translator Dilemma
By MAJ John W. Davis, USA Ret.
Page 20

88Ms: Not *Just* Truck Drivers
By BG Stephen E. Farmen
Page 22

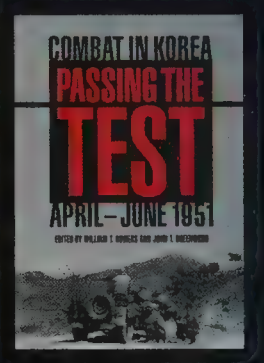
ARMY CONTENTS

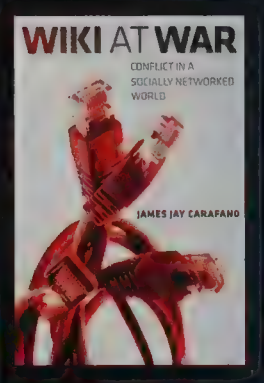
Company Command—Building Combat Ready Teams: Advice for New Lieutenants
Because "life accelerates quickly for second lieutenants," their more recently seasoned elders offer some valuable words of wisdom. ***Page 51***

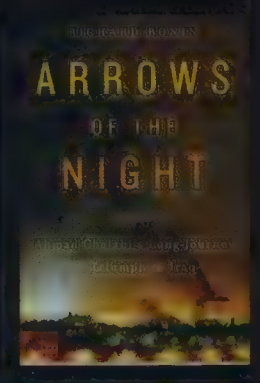
Historically Speaking—Harrison's Landing at 150
By BG John S. Brown, USA Ret.
The withdrawal of MG George B. McClellan's Army of the Potomac into Harrison's Landing, Va., 150 years ago marked the end of the Peninsular Campaign, where outnumbered Confederate troops defeated larger, but indecisive, Federal forces, leading to more years of war.
Page 67

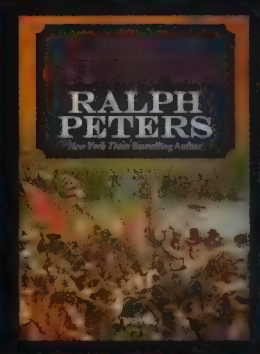
DEPARTMENTS

Letters 5
Advertisers in This Issue 7
Washington Report 8
News Call 9
Soldier Armed 57
Sustaining Member Profile 60
Reviews 61









RAM® MILITARY MOUNTS

Contractors who trust RAM®

NORTHROP GRUMMAN

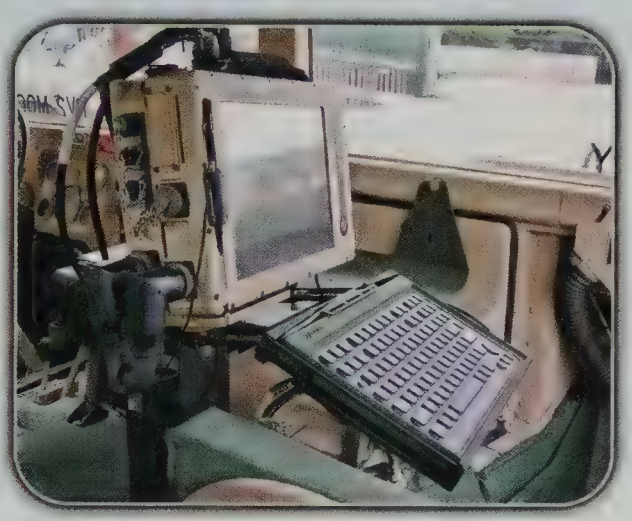
Raytheon

LOCKHEED MARTIN

Rockwell Collins

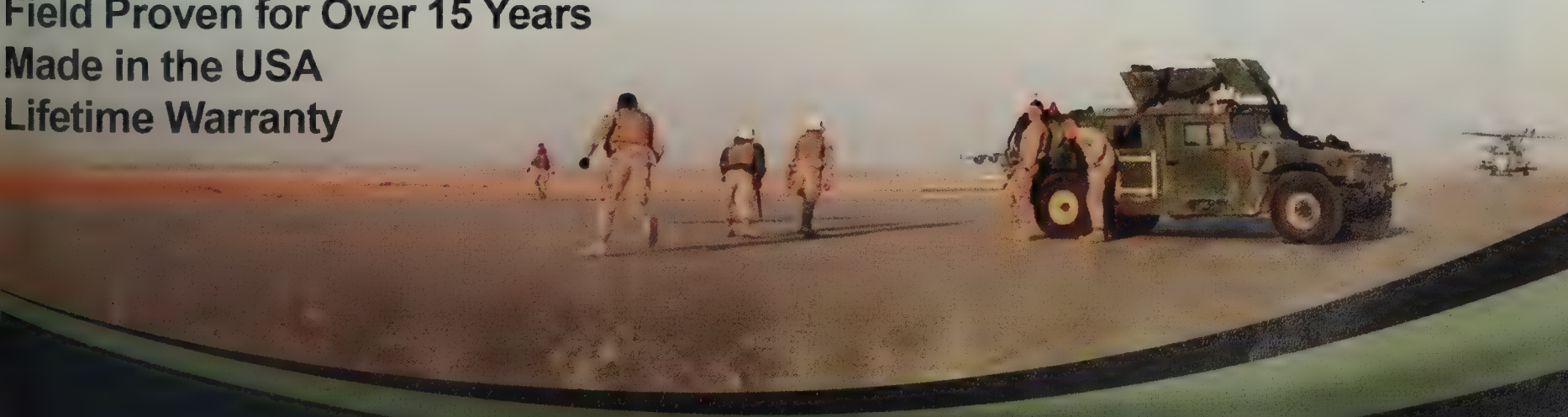
TRW

DRS TECHNOLOGIES



THE RAM® MOUNT ADVANTAGE

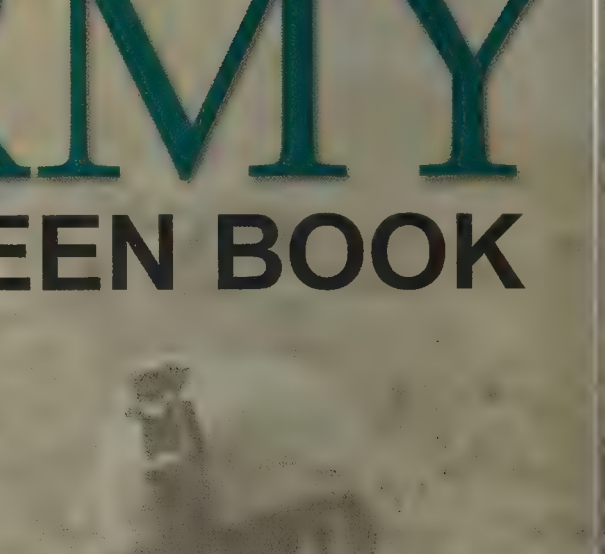
- RAM® Shock Absorbing Mounts Protect Electronics for Improved Reliability
- Field Proven for Over 15 Years
- Made in the USA
- Lifetime Warranty



WWW.MILITARYMOUNT.COM

National Products, Inc. | Address: 8410 Dallas Ave. S., Seattle, WA 98108
Phone: (206) 763-8361 | Fax: (206) 763-9615
Website: www.ram-mount.com | Email: sales@ram-mount.com

ARMY
2012 GREEN BOOK



Photos Courtesy of U.S. Army

Your best buy in advertising for reaching Army leaders again and again!

The 2012 ARMY Green Book, which is the October issue of ARMY Magazine, is used by military and government personnel as a yearlong reference tool.

Not only will it be sent to Army leaders who are members of AUSA, it will also be distributed at the Association of the U.S. Army (AUSA) Annual Meeting and Exposition in October. Total circulation of the GREEN BOOK is over 100,000.

Advertising Reservations Due
20 August 2012

Advertising Materials Due
3 September 2012

Advertising Department:

Irene Lamar
Jim Burke
230 Park Avenue, Suite 1546
New York, NY 10169
(212) 697-2844
Fax (212) 682-1421
ADVDPT@aol.com

ASSOCIATION OF THE UNITED STATES ARMY

GEN Gordon R. Sullivan, USA Ret.
President, AUSA

LTG Theodore G. Stroup Jr., USA Ret.
Vice President, Education, AUSA

Mary Blake French — *Editor in Chief*
Paul W. Bartels — *Art Director*
Larry Moffi — *Managing Editor*
Dennis Steele — *Senior Staff Writer*
Toni Eugene — *Associate Editor*
Joseph L. Broderick — *Production Artist*
Jeremy Dow — *Assistant Editor*
Katharine Scott — *Assistant Editor*
Thomas B. Spincic — *Editorial Assistant*

Contributing Editors
GEN Frederick J. Kroesen, USA Ret.; LTG James M. Dubik, USA Ret.; and Scott R. Gourley

LTG Thomas G. Rhame, USA Ret.
Vice President, Finance and Administration, AUSA

James E. Burke — *Advertising Manager*
Meagan B. Bailey
Advertising Production Manager

Norman Campbell — *Fulfillment Director*
Valerie Holman — *Fulfillment Manager*

ARMY is a professional journal devoted to the advancement of the military arts and sciences and representing the interests of the U.S. Army. Copyright©2012, by the Association of the United States Army. ☐ **ARTICLES** appearing in ARMY do not necessarily reflect the opinion of the officers or members of the Council of Trustees of AUSA, or its editors. Articles are expressions of personal opinion and should not be interpreted as reflecting the official opinion of the Department of Defense nor of any branch, command, installation or agency of the Department of Defense. The magazine assumes no responsibility for any unsolicited material. ☐ **ADVERTISING**. Neither ARMY, nor its publisher, the Association of the United States Army, makes any representations, warranties or endorsements as to the truth and accuracy of the advertisements appearing herein, and no such representations, warranties or endorsements should be implied or inferred from the appearance of the advertisements in the publication. The advertisers are solely responsible for the contents of such advertisements. ☐ **RATES**. Individual memberships and subscriptions payable in advance (one year/three year): $21/$63 for E1-E4, cadets/OCS and GS1-GS4; $26/$71 for E5-E7, GS5-GS6; $31/$85 for E8-E9, O1-O3, W1-W3, GS7-GS11 and veterans; $34/$93 for O4-O6, W4-W5, GS12-GS15 and civilians; $39/$107 for O7-O10, SES and ES; life membership, graduated rates to $525 based on age; $17 a year of all dues is allocated for a subscription to ARMY Magazine; single copies, $3.00. Additional postage to all foreign countries, $15 per year. For other rates, write Fulfillment Manager, Box 101560, Arlington, VA 22210-0860.

ADVERTISING. Information and rates available from the Advertising Production Manager or our advertising representatives, who are:

The Audit Bureau

James E. Burke and **Irene Lamar**, 230 Park Ave., Suite 1546, New York, NY 10169. (212) 697-2844. FAX (212) 682-1421. Email: advdpt@aol.com.

ARMY (ISSN 0004-2455), published monthly. Vol. 62, No. 7. Subscription $34 a year. Publication offices: Association of the United States Army, 2425 Wilson Blvd., Arlington, VA 22201-3326, (703) 841-4300, FAX: (703) 841-3505, email: armymag@ausa.org. Visit AUSA's web page on the Internet at www.ausa.org. Periodicals postage paid at Arlington, Va., and at additional mailing office.
POSTMASTER: Send address changes to ARMY Magazine, Box 101560, Arlington, VA 22210-0860.

Letters

'Our Honored Dead, Overseas'

■ As a U.S. Army officer who has served most of my near-30-year career overseas, I found BG John Brown's "Historically Speaking" article in the May issue to be a very good summary of the cemeteries and monuments abroad that honor the many Americans who died for their country in foreign lands.

I have visited many of the cemeteries mentioned in the article. One note, however, caught my eye. He wrote, "Since World War II we have returned our dead to the United States rather than burying them overseas." Technically this is true, but I'd like to point out one cemetery not mentioned by BG Brown: the U.N. Memorial Cemetery Korea (UNMCK) in Busan, South Korea.

The UNMCK honors U.N. soldiers from 16 countries who were killed in battle during the Korean War from 1950 to 1953. There were 21 U.N. countries that participated in the Korean War. Seventeen nations suffered casualties during that conflict, and 11 nations, including Korea, have their dead interred at the UNMCK. Approximately 11,000 were interred there between 1951 and 1954. There are currently 2,300 at the UNMCK, including Korean soldiers who fell as members of U.N. troops. After the war, most were repatriated home; Belgium, Colombia, Ethiopia, Greece, Luxemburg, the Philippines and Thailand have taken back all of their expatriates. The United States—with the highest number of casualties during the war—took all of their fallen home soon afterwards. There are 36 U.S. servicemembers or veterans, however, currently interred in UNMCK, most of whom participated in the Korean War and expressed their wish to be buried there during the years after the war.

U.S. Army

Chaplain (MAJ) Kevin Pies, U.S. Army Space and Missile Defense Command/Army Forces Strategic Command, stands outside the United Nations Memorial Cemetery in Busan, South Korea.

This Month's Cover

CW4 Kali Pettigrew is chief engineering officer aboard the U.S. Army's Logistics Support Vessel (LSV)-1, the *GEN Frank S. Besson Jr.* The LSV-class vessels are the largest ships currently operated by the Army. CW4 Pettigrew was accepted into the Army's warrant officer candidate program from the Navy. He said he was looking for challenge and opportunity, which the warrant officer field offers. Warrant officers, he says, combine leadership, mentorship and technical expertise, and the Army's warrant officer education system encourages professional growth. Army warrant officers trace their lineage to the sea and still proudly serve on it. The story begins on page 38.

(Cover photograph by Dennis Steele)

These Americans who chose to be buried in a foreign country where many of their comrades lost their lives are now honored on a daily basis by the Koreans. In fact, the UNMCK is one of the best-maintained and most beautiful military cemeteries, as Koreans still remember the huge price the United States and other U.N. countries paid to ensure the freedoms they enjoy today.

COL KENNETH JOHNSON
Stuttgart, Germany

ARMY Magazine welcomes letters to the editor. Short letters are more likely to be published, and all letters may be edited for reasons of style, accuracy or space limitations. Letters should be exclusive to ARMY Magazine. All letters must include the writer's full name, address and daytime telephone number. The volume of letters we receive makes individual acknowledgment impossible. Please send letters to The Editor, ARMY Magazine, AUSA, 2425 Wilson Blvd., Arlington, VA 22201. Letters may also be faxed to (703) 841-3505 or sent via e-mail to armymag@ausa.org.

'My Longest Day'

■ William P. Baxter's April article, "My Longest Day," was very interesting, but the last paragraph made me jump out of my chair, having experienced similar treatment but with far better results.

I served six years in the Vietnam War with a first tour of four and a half years starting in January 1966. I was assigned as an infantry intelligence and reconnaissance NCO to the 1st Air Cavalry but was emergency-reassigned to the MACV [Military Assistance Command, Vietnam] J2 while at Oakland, Calif., Army Terminal.

After arriving in Vietnam, I was tasked with starting an intelligence-data-handling system in a collateral unit with the Vietnamese in less than 90 days. I was also told there would be no authorized funds or personnel until the new fiscal year, more than nine months away, which I took to mean that I was to create this unit by "midnight requisitioning."

Eventually I ran into an old friend, SPC Ray Holley, at Saigon Port, who was able to "hook me up" with everything I needed. In less than 45 days the unit was operational. Working more than 14 hours a day—except Saturday, when I did my laundry, got a haircut, etc.—I created numerous files, one of which was radio intercepts of enemy units assigned animal names (only our U.S. Army MI lieutenants knew the actual unit IDs). I picked a VC [Viet Cong] local force battalion as my "pet unit" to track.

One Saturday evening I was sitting in my favorite bar across from my billet when a Green Beret SFC walked in and took a seat beside me. He was assigned to SOG [special operations group] and was training Cambodian mercenaries. I told him about my VC local force battalion near him and that it followed the same route from Cambodia into Vietnam and then back into Cambodia. He grew very interested and said he wanted to test his newly trained men on this unit. The next day I printed all of the data (without sources), classified it as "secret" and mailed it via APO registered mail to him. He planned a horseshoe ambush, which wiped out the unit.

Like LTC Baxter, who, upon visiting the USARV [U.S. Army Vietnam] G2, discovered it had prior knowledge that the battle would ensue but could not tell LTC Baxter or his advisors because they did not have high enough security clearance, I found my SFC was in the same situation and immediately decided to find a way to get the intelligence to the men at the sharp end of the spear.

I contacted several advisory teams next to airfields in the Mekong Delta (IV Corps). I printed sample pages of each of my files with coordinates close to each team and booked Air America flights to each airfield. (I put the pages in a plastic folder and pinned it inside my fatigue jacket. I smoked and carried a Zippo lighter. If the situation required it, I would light the plastic and the pages would quickly burn up.)

Meeting with each unit, I briefed them on the information I had. They were flabbergasted that such data was available and was not being sent to them. We came up with a code for a verbal or typed message to me that would tell me the coordinates they needed for their next operation. A few hours after receiving their requests I would mail them the information they needed and later, when I had that capability, map overlays.

I told all MACV advisors and SOG teams on my mailing list to spread the word, but that it was not to get back up to MACV headquarters. They kept their word, and while I was never "tapped on the shoulder" for this activity, I was eventually put under house arrest for "stealing" $187,000 worth of equipment and supplies from Saigon Port. After the Criminal Investigation Division officers left me, I quickly made my way to the J2's office, and he had the investigation cancelled.

Why were our men in the field facing the enemy on an almost daily basis not given *all* of the intelligence available? Many lives were lost—including Vietnamese and our allies—because of someone's decision in an "ivory tower" not to give one or more men on each team clearances and access to read the intelligence, destroy it and then act on it. How many good men did we lose?

MSG HOWARD A. DANIEL III,
USA RET.
Dunn Loring, Va.

'Improving Officer Evaluations'

■ When I read the "Improving Officer Evaluations" letter to the editor in the May issue of ARMY, I was reminded of a humorous incident that occurred when about 45 other colonels and I were selected for brigadier general (BG) in the spring of 1975. We attended what at that time was "charm school" for newly selected BGs in the Pentagon. For three days we were briefed by the Army staff on current and future plans and how we were expected to behave as generals. The deputy chief of staff for personnel at that time was LTG Harold (Hal) G. Moore, who started his briefing by describing certain precautions that we as new generals needed to be aware of.

"Now that you are going to be gen-

erals," he said, "you will be expected to act with more decorum and dignity than perhaps many of you have in the past. For example, if someone brings an absolutely nutty idea to you for action and you realize immediately the idea won't fly, as colonels you might and probably would dismiss it with a simple *bull ——!* Now that you are going to be generals, the expected response should be something more subtle, more in keeping with what the Army expects among its generals. Instead of a blunt *bull ——*, as general officers you need to substitute that with a word like *incredible*."

As LTG Moore continued his briefing, he announced in an almost confidential and you-are-among-the-first-to-know whisper, "After many months of study and analysis, we have developed and recently approved a new version of the Army Officer Efficiency Report that will ensure a more accurate and comprehensive evaluation of an officer's performance and potential."

Moore had hardly gotten the words out of his mouth when an incredulous voice from the middle of the group of soon-to-be-generals hollered out, "Incredible!" We couldn't stop laughing, and neither could Hal Moore, who, having realized he'd lost it, just waved his hand and left the stage.

MG Guy S. Meloy, USA Ret.
Georgetown, Texas

Ranger Uniforms

■ The picture that accompanies the May "News Call" article "Coalition Will Stay the Course in Afghanistan" has 1-75 Ranger Regiment NCOs wearing MultiCam uniforms with Sta-Brite badges and full-color unit patches for their ceremony. I haven't checked the regulations on this, but I think it looks great. It takes me back to the uniforms from the World War II era, when the Army had similar standards in garrison. When we first came out with the Velcro patches, I remember making the same comment.

I think Army leadership should look at options like this when making uniform decisions. Simple changes to the presentation of current uniforms in garrison with badges and patches that are already in the inventory will boost unit morale while keeping the cost to soldiers and the Army at a minimum.

Once again, Rangers Lead the Way.
Joe Schotzko
Fort Campbell, Ky.

ADVERTISERS IN THIS ISSUE

ARMY Green Book	4	Space and Missile Defense Conference	15
AUSA Annual Meeting	14, 64, 65	SRC Inc.	Cover IV
AUSA Membership	16	Streamlight, Inc.	7
Blackhawk	23		
Boeing	Cover II		
IHG Army Hotels Group	13		
ITT Exelis	Cover III		
Lockheed Martin	27		
RAM Mounts	3		
SATO Travel	21		

ADVERTISING. Information and rates available from the Advertising Production Manager or our advertising representatives:

The Audit Bureau

James E. Burke and Irene Lamar, 230 Park Ave., Suite 1546, New York, NY 10169. (212) 697-2844. FAX (212) 682-1421. Email: advdpt@aol.com.

Washington Report

Congress Expands Army's Early Discharge Authority

In June, the Army began implementing its authority to discharge some soldiers three months to one year before their official date of separation, commonly known as their expiration term of service.

While the decision to expand the Army's power to separate Regular Army enlisted servicemembers comes as the result of amended congressional legislation, DoD announced in a news release that the service will effect this authority "in a very targeted manner to address readiness in deploying formations by stabilizing enlisted soldiers at least six months prior to deployment."

According to the DoD release, "The Army will not immediately increase the period of early separation to one year, [instead] it will implement this change in a phased manner based on scheduled unit deployment dates." Under the Army's Enlisted Involuntary Early Separation Program, certain soldiers who lack sufficient time left in their tours and who remain in rear units of deployed detachments will be targeted for the early separation. The early separation plan, however, will affect just a "small percentage of soldiers in deploying units," and those soldiers "whose scheduled separation date precludes them from deploying with their unit will be given the opportunity to reenlist or extend."

"Soldiers with more than three years of active service but less than six years of total service [and who] elect not to reenlist or extend will be subject to involuntary early separation." In addition, unit commanders have been granted "the discretion to retain a soldier for operational necessity or compassionate reasons."

Soldiers seeking additional information are advised to meet with their unit's career counselor.

Medal of Honor. Following his posthumous award of the Medal of Honor in May, Army SPC 4 Leslie H. Sabo Jr., a rifleman with the 101st Airborne Division who was killed in eastern Cambodia during the Vietnam War, was inducted into the Hall of Heroes at the Pentagon. His widow, Rose Mary Sabo-Brown, and his brother, George, received a framed picture and letter honoring SPC Sabo, and his name was added to the list of Medal of Honor recipients.

SPC Sabo was honored for saving the lives of several fellow soldiers when his platoon was ambushed near the Se San River on May 10, 1970. He charged the enemy position, drawing fire away from his unit; shielded a wounded comrade from an enemy grenade with his own body; and threw another into the enemy bunker before dying of his wounds. Secretary of the Army John M. McHugh, Defense Secretary Leon E. Panetta and Army Chief of Staff GEN Raymond T. Odierno participated in the ceremony.

Commemorating the Vietnam War. In a Memorial Day ceremony at the Vietnam War Memorial on the National Mall in Washington, D.C., President Obama marked the beginning of a 13-year-long commemoration of the 50th anniversary of that conflict.

In addressing veterans, the President said that the way our troops returning from Vietnam were treated was "a national shame" and that "a central part of this 50th anniversary will be to tell your story as it should have been told all along." There are more than 1,300 Americans still missing from the war, though more of those may be found now that the government of Vietnam decided to open three previously restricted sites to the Joint Prisoners of War/Missing in Action Accounting Command.

Noting that even historians cannot agree on when the war began, with American advisors serving in the country as early as the mid-1950s and major combat operations starting in the mid-1960s, the President said 1962 was the year that illustrated the changing nature of U.S. involvement in Vietnam. U.S. forces participated for the first time in major combat (Operation Chopper) in January, when American Army pilots in Shawnee helicopters ferried 1,000 South Vietnamese soldiers in to sweep a Viet Cong stronghold near Saigon.

The Vietnam War Commemoration will continue through November 11, 2025. For more information, visit www.vietnamwar50th.com.

Rose Mary Sabo-Brown and George Sabo, widow and brother of Medal of Honor recipient Army SPC 4 Leslie H. Sabo Jr.

News Call

First Female Soldiers Report to Brigade Combat Teams

In May, the 4th Brigade Combat Team (BCT), 101st Airborne Division, Fort Campbell, Ky., welcomed the first Army women to its ranks. The 35 women who joined the 101st are among more than 200 participating in the Women in Service Review, a DoD initiative that was announced in February and would ultimately rescind the military's exclusion of women in direct ground combat.

The Army will assess the impact of the change over a six-month period and then make recommendations on women's future assignments. In addition to the 101st at Fort Campbell, eight BCTs at the following installations are participating.

- Fort Carson, Colo.
- Fort Drum, N.Y.
- Fort Hood, Texas
- Fort Knox, Ky.
- Schofield Barracks, Hawaii

If approved, the Pentagon initiative, which opens more than 13,000 jobs to women in six military occupation specialties (MOS), would mean that women would be officially assigned—as opposed to being merely "attached"—to BCTs. The six MOSs are:

- 13M—Multiple Launch Rocket System (MLRS) crewmember.
- 13P—MLRS Operations/Fire Direction Specialist.
- 13R—Field Artillery Firefinder Radar Operator Specialist.
- 91A—M1 Abrams Tank System Maintainer.
- 91M—Bradley Fighting Vehicle System Maintainer.
- 91P—Artillery Mechanic.

According to Army Chief of Staff GEN Raymond T. Odierno, the program will also look into opening infantry and armor MOSs to women. "If we determine that we're going to allow women to go to infantry, and if they're successful," he said, "they are probably, at some time, going to have to go through Ranger School."

Afghanistan Update. At a summit in late May in Chicago, NATO leaders declared that the transition of security to Afghan forces that began in July 2011 is "irreversible," on track and will be completed by the end of 2014, with Afghan forces taking the lead in combat operations nationwide by the end of 2013.

President Obama told reporters after the meeting that "we leave Chicago with a clear road map" to bring the "war in Afghanistan to a responsible end." NATO stressed its commitment to a long-term partnership with Afghanistan in the following years.

The shift of responsibility to Afghan troops, which NATO calls Milestone 2013, is well under way. In May, Afghan president Hamid Karzai announced the third group of provinces to make this transition, which will bring a total of 75 percent of the country's population under Afghan security control.

Commander of NATO's International Security Assistance Force (ISAF) in Afghanistan, Marine Corps Gen. John R. Allen, affirmed that Afghan forces will take the lead but said he expects stiff resistance from the Taliban during this year's fighting season and noted that "combat operations will continue in the country throughout the period of the remainder of the ISAF mission, which will conclude on the 31st of December 2014." The first priority in Afghanistan remains keeping pressure on the Taliban, while the second is accelerating the training and capabilities of Afghan security forces.

Special Forces Honored. In a late May ceremony at Fort Bragg, N.C., the Governor General and Commander in Chief of Canada awarded the Canadian Commander in Chief Unit Commendation to the 1st Battalion, 3rd Special Forces Group at Fort Bragg, N.C. The award cites the Special Forces group for heroic action in Afghanistan

SSG Nikishe A. Simon, 1st Battalion, 506th Infantry Regiment, 4th Brigade Combat Team, 101st Airborne Division, works in her new assignment in a maneuver battalion as part of the Women in Service Review.

during the Canadian-led Operation Medusa. It is the first time the Canadian government has given an award for valor to a foreign military service.

According to the citation: "After completing their initial objectives, the Special Forces members willingly engaged a much larger force to secure the Canadian Battle Group's flank and prevented the enemy from staging an effective counteroffensive. Outnumbered and facing a well-prepared enemy, they relentlessly assaulted the objective and eventually captured the position after intense days of fighting."

The events of Operation Medusa are featured in the book *Lions of Kandahar: The Story of a Fight Against All Odds* by MAJ Rusty Bradley, U.S. Army Special Operations Command, Fort Bragg, N.C.

Warriors in Transition. The Savannah District of the U.S. Army Corps of Engineers (USACE) recently completed construction of a $25.1-million Warrior in Transition barracks complex that will help wounded and injured soldiers rehabilitate or make the transition back to military duty or civilian life. The Fort Stewart, Ga., barracks is part of a three-stage development to help soldiers in the Army's Warrior Care and Transition Program.

At 144,600 square feet, the facility accommodates 240 soldiers in two buildings. Each building contains two apartment-style floor plans: a two-bedroom, two-bathroom apartment with shared kitchen, living room and laundry room; and a smaller, two-bedroom, one-bath apartment with a shared kitchen. Ten percent of the rooms feature countertops, bathrooms and equipment that are easily accessible for a wheelchair-bound person and comply with the Americans with Disabilities Act.

The barracks complex is next to a

GENERAL OFFICER CHANGES*

**Assignments to general officer slots announced by the General Officer Management Office, Department of the Army. Some officers are listed at the grade to which they are nominated, promotable or eligible to be frocked. The reporting dates for some officers may not yet be determined.*

MG K.R. Dahl from Dep. CG (Spt.), 10th Mountain Div., Fort Drum, N.Y., to Dep. CG-Spt., USF-A, OEF, Afghanistan.

MG S.M. Dyer, USAR, from Cmdr., 335th Signal Cmd. (Theater), East Point, Ga., to Chief Integration Officer, OCIO/G-6, Washington, D.C.

MG R.M. Dyess Jr. from Dir., RID, ARCIC, TRADOC, JB Langley-Eustis, Va., to Dir., FD, ODCS, G-8, USA, Washington, D.C.

MG F.B. Hodges from Chief, Legislative Liaison, OSA, Washington, D.C., to Chief of Land Command, Izmir, Stand Up Team, NATO, Turkey.

MG B.R. Kelly, USAR, from Cmdr. (TPU), MRTC, Fort Sam Houston, Texas, to CG (TPU), AR-MEDCOM, Pinellas Park, Fla.

MG S.R. Lanza from Chief of Public Affairs, OSA, Washington, D.C., to CG, 7th Infantry Division, JB Lewis-McChord, Wash.

MG P.S. Lennon, USAR, from Acting Cmdr. (TPU), 377th TSC, New Orleans, La., to CG (TPU), 377th TSC, New Orleans, La.

MG G.J. Lesniak, USAR, from CG, 88th RSC, Fort McCoy, Wis., to Dep. CG-Spt., USARC, Fort Bragg, N.C.

MG G.A. Medvigy, USAR, from Cmdr. (TPU), 351st Civil Affairs Cmd., Mountain View, Calif., to Dep. CG (Spt.) (IMA), Eighth U.S. Army, Yongsan, Republic of Korea.

MG M.W. Perrin from Dir., J-2, USF-I, OND, Iraq, to Dep. Dir., SID, NSA, Fort Meade, Md.

MG D.W. Puster, USAR, Cmdr. (TPU), 84th Div. (IT), Milwaukee, Wis., to CG (TPU), 84th Div. (IT), Milwaukee.

MG B.S. Sacolick from CG, USAJFKSWC, Fort Bragg, N.C., to Dir., Force Mgmt. and Development, USSOCOM, MacDill AFB, Fla.

MG S.W. Smith, USAR, from Chief Integration Officer, OCIO/G-6, Washington, D.C., to Dep. Cmdr., 335th Signal Cmd. (Theater Operational Cmd. Post) (Forward), Camp Arifjan, Kuwait.

MG M.P. Tatu, USAR, from Cmdr. (TPU), 5th Bde. (MC), 75th Training Div. (MC), Dublin, Calif., to CG (TPU), 79th SSC, Los Alamitos, Calif.

MG L.R. Visot, USAR, from CG, 377th TSC, New Orleans, La., to Dep. CG-Ops., USARC, Fort Bragg, N.C.

MG D.L. York, USAR, Cmdr. (TPU), 86th Training Div. (Ops.), Fort McCoy, Wis., to CG (TPU), USARJSTSC, Salt Lake City, Utah.

15,000-square-foot family assistance center, which was completed in 2010 and is staffed with personnel who provide guidance, assistance and information on finances, child care, family advocacy, legal assistance and a variety of other support services to help the soldiers and their families. The center also contains a child activity center and playground, covered courtyard, break room and kitchen.

An administrative facility scheduled for completion in November will house the staff that manages daily operations and the activities of the recovering soldiers.

USAR Names New CCW. CW5 Phyllis Wilson, named in May as the new command chief warrant officer (CCW), Army Reserve and U.S. Army Reserve Command, assumes her new duties this month and will serve at the headquarters of the Office of the Chief, Army Reserve, Fort Belvoir, Va. She succeeds CW5 James E. Thompson, CCW of the Army Reserve since September 2010.

As the CCW, she will represent and advise the chief and deputy chief of the Army Reserve and their staff on matters such as managing, resourcing, organizing, administering, mobilizing and demobilizing warrant officers within the command. She will also coordinate policy and statutory changes to foster the advancement of initiatives for the Warrant Officer Corps.

CW5 Wilson enlisted in the Army in 1981 as a military intelligence voice intercept operator before attending warrant officer school in 1989. After receiving her appointment, she served in various military intelligence positions throughout the Army. She was promoted to CW5 in 2009 and has served as the all-source intelligence analyst technician with Military Intelligence Readiness Command, Fort

Brigadier Generals: **D.F. Anderson,** USAR, from Cmdr. (TPU), 97th Training Bde., Fort Sheridan, Ill., to Cmdr, (TPU), 3rd Bde. (MC), 75th Training Div. (MC), Fort Sheridan; **T.E. Ayres** from CG/Cmdt./JAGLCS, Charlottesville, Va., to CG, USALSA/Chief Judge, ACCA, Fort Belvoir, Va.; **D.C. Baldwin** from Cmdr. (TPU), 332nd Med. Bde., Nashville, Tenn., to Cmdr. (TPU), MRTC, Fort Sam Houston, Texas; **W.P. Barriage,** USAR, from Chief (TPU), 253rd Civil Affairs Cmd., Staten Island, N.Y, to Cmdr. (TPU), 1st Bde. (MC), 75th Training Div. (MC), Houston, Texas; **L.P. Burch,** USAR, from Cmdr. (TPU), 22nd LSO, Grand Prairie, Texas, to Chief Judge (IMA), USALSA, Arlington, Va.; **M.R. Chitwood,** USAR, from G-7 (TPU), USAR Legal Cmd., Gaithersburg, Md., to Dep. CG (TPU), 63rd RSC, Moffett Field, Calif.; **J.M. Cho** from Cmdr., 30th Medical Cmd., Germany, to Asst. SG for Force Mgmt., OSG, USA, Falls Church, Va.; **J.B. Clark** from Cmdr., LRMC, Germany, to Cmdr., ERMC/Cmd. Surgeon, USAREUR and Seventh Army, Germany; **R.L. Cloutier Jr.** from Dep. Cmdr. (Maneuver), 3rd Infantry Div. (Mechanized), Fort Stewart, Ga., to XO to the SACEUR, SHAPE, Belgium; **P.C. Combs** from Dep. Cmdr., USACC, Fort Knox, Ky., to Cmdt., USACBRNS, MS CoE, Fort Leonard Wood, Mo.; **N.V. Coots** from Special Asst. to the SG, Falls Church, Va., to SG, USF-A/Medical Advisor, IJC, OEF, Afghanistan; **S.K. Curda,** USAR, from Cmdr. (TPU), 308th Civil Affairs Bde., Homewood, Ill., to Cmdr. (TPU), 351st Civil Affairs Cmd., Mountain View, Calif.; **F.D. Darpino** from CG, USALSA/Chief Judge, ACCA, Fort Belvoir, Va., to CG/Cmdt., JAGLCS, Charlottesville, Va.; **A.M. Deblieck,** USAR, from Acting Cmdr. (TPU), 103rd SC(E), Des Moines, Iowa, to Cmdr. (TPU), 103rd SC(E), Des Moines; **S.W. Duff,** ARNG, from Dep. CG, USASFC(A), Fort Bragg, N.C., to CoS, KFOR, Pristina, Kosovo; **C.R. Gentry,** USAR, from Cmdr. (TPU), 643rd RSG, Whitehall, Ohio, to Asst. CoS, G-5 (IMA), Eighth U.S. Army, Yongsan, Republic of Korea; **N.B. Green,** USAR, from CoS (TPU), 79th SSC, Los Alamitos, Calif., to Cmdr. (TPU), 4th SC(E), San Antonio, Texas; **C.K. Haas** from Cmdr., CFSOCC-A, OEF, Afghanistan, to CG, USASFC(A), Fort Bragg, N.C.; **F.A. Henry** from Dep. CG, NETCOM, Fort Huachuca, Ariz., to CoS, DISA, Fort Meade, Md.; **L.G. Irwin,** USAR, from Acting Cmdr. (TPU), 926th EB, Montgomery, Ala., to Cmdr. (TPU), 926th EB, Montgomery; **T.S. James Jr.** from Cmdt., U.S. Army Armor School, MCoE, Fort Benning, Ga., to Dep. CG, 1st Cavalry Div., Fort Hood, Texas; **P.S. Jolly,** USAR, from Cmdr. (TPU), 364th Sustainment Bde., Marysville, Wash., to Cmdr. (TPU), ARSC, Birmingham, Ala.; **K. Jones,** USAR, from Cmdr., 505th Signal Cmd., Las Vegas, Nev., to Dep. Cmdr., 335th Signal Cmd. (Theater), East Point, Ga.; **R.A. Karmazin,** USAR, from Sr. Ops. Officer (TPU), ARCU, DoS, Washington, D.C., to Cmdr. (TPU), 5th Bde. (MC), 75th Training Div. (MC), Dublin, Calif.; **T.D. Kok,** USAR, from Asst. CoS, G-4 (AGR), USACAPOC(A), Fort Bragg, N.C., to Cmdr. (TPU), 11th Aviation Cmd., Fort Knox, Ky.; **T.W. Kula** from CG, USACE, Southwestern Div., Dallas, Texas, to Dir., JED, USF-A, OEF; **W.S. Lee,** USAR, from Cmdr. (TPU), 330th Med. Bde., Fort Sheridan, Ill., to Dep. Cmdr. for Professional Services (TPU), 807 MC (DS), Salt Lake City, Utah; **M.D. Lundy** from Dep. Cmdr. (Spt.), 1st Armored Div., Fort Bliss, Texas, to Dep. Cmdr., CAC-T, TRADOC, Fort Leavenworth, Kan.; **T.P. McGuire** from Dep. CLL, OSA, Washington, D.C., to Dep. CG, 82nd Airborne Div., Fort Bragg, N.C.; **K.L. McNeely,** ARNG, from Dir., Strategic Plans and Policy (J-5), NGB, Washington, D.C., to Dir. EPTF, EUCOM, Germany; **S.P. Mulholland** from Dep. Dir. of Ops., J-3, USSOCOM, MacDill AFB, Fla., to Cmdr., SOCSOUTH, SOUTHCOM, Homestead Air Reserve Base, Fla.; **W.E. Piatt** from Cmdt., USAIS, MCoE, Fort Benning, Ga., to Dep. CG, 10th Mountain Div. (L), Fort Drum, N.Y.; **M.R. Quantock** from Chief, CJ-2, IJC, OEF, Afghanistan, to Dep. Dir. for Trans-Regional Policy, J-5, Jt. Staff, Washington, D.C.; **E.M. Reeder Jr.**, from CG, USASFC(A), Fort Bragg, N.C., to CG, USAJFKSWC, Fort Bragg; **T.S. Smith,** USAR, from Chief (AGR), GOMO/Dir., SLMO, OCAR, Fort Belvoir, VA., to Dep. Chief, AR, OCAR, Washington, D.C.; **M.S. Tuomey,** USAR, from Cmdr. (TPU), ARE, DLA, Fort Belvoir, Va., to Dep. Cmdr. for Mobilization (IMA), SDDC, Scott AFB, Ill.; **G.J. Volesky** from Dep. CG (Maneuver), 1st Cavalry Div., Fort Hood, Texas, to Chief of Public Affairs, OSA, Washington, D.C.; **N.Y. West** from CG, ERMC/Cmd. Surgeon, USAREUR and Seventh Army, Germany, to Asst. SG for Force Sustainment, OSG/USA, Falls Church, Va.

■ ***ACCA**—U.S. Army Court of Criminal Appeals; **AFB**—Air Force Base; **AGR**—Active Guard and Reserve; **AR**—Army Reserve; **ARCIC**—Army Capabilities Integration Center; **ARCU**—Army Reserve Counterterrorism Unit; **ARE**—Army Reserve Element; **AR-MEDCOM**—Army Reserve Medical Cmd.; **ARNG**—Army National Guard; **ARSC**—Army Reserve Sustainment Cmd.; **CAC-T**—Combined Arms Center-Training; **CFSOCC-A**—Combined Forces Special Operations Component Cmd.-Afghanistan; **CLL**—Chief, Legislation Liaison; **CoS**—Chief of Staff; **DISA**—Defense Information Systems Agency; **DLA**—Defense Logistics Agency; **DoS**—Dept. of State; **DS**—Deployment Spt.; **EB**—Engineer Bde.; **EPTF**—European Partnership Task Force; **ERMC**—Europe Regional Medical Cmd.; **EUCOM**—U.S. European Cmd.; **FD**—Force Development; **GOMO**—General Officer Mgmt. Office; **IJC**—International Security Assistance Force Jt. Cmd.; **IMA**—Individual Mobilization Augmentee; **IT**—Institutional Training; **JAGLCS**—U.S. Army Judge Advocate General's Legal Center and School.; **JB**—Joint Base; **JED**—Joint Engineering Directorate; **KFOR**—Kosovo Force; **LRMC**—Landstuhl Regional Medical Center; **LSO**—Legal Spt. Organization; **MC**—Mission Cmd.; **MC (DS)**—Medical Cmd. (Deployment Spt.); **MRTC**—Medical Readiness and Training Cmd.; **MCoE**—U.S. Army Maneuver Center of Excellence; **MS CoE**—Maneuver Support Center of Excellence; **NETCOM**—U.S. Army Network Enterprise Technology Command; **NGB**—National Guard Bureau; **NSA**—National Security Agency; **OCAR**—Office of the Chief, Army Reserve; **OCIO**—Office of the Chief Information Officer; **ODCS**—Office of the Deputy Chief of Staff; **OEF**—Operation Enduring Freedom; **OND**—Operation New Dawn; **OSA**—Office of the Secretary of the Army; **OSG**—Office of the Surgeon General; **RID**—Requirements Integration Directorate; **RSC**—Regional Support Cmd.; **RSG**—Regional Spt. Group; **SACEUR**—Supreme Allied Commander, Europe; **SC(E)**—Sustainment Cmd. (Expeditionary); **SDDC**—Surface Deployment and Distribution Cmd.; **SG**—Surgeon General; **SHAPE**—Supreme Headquarters Allied Powers Europe; **SID**—Signals Intelligence Directorate; **SLMO**—Sr. Leader Mgmt. Office; **SOCSOUTH**—Special Operations Cmd. South; **SSC**—Sustainment Spt. Cmd.; **SOUTHCOM**—U.S. Southern Cmd; **TPU**—Troop Program Unit; **TSC**—Theater Support Cmd.; **TRADOC**—U.S. Army Training and Doctrine Cmd.; **USA**—U.S. Army; **USACAPOC(A)**—U.S. Army Civil Affairs & Psychological Operations (Airborne); **USACBRNS**—U.S. Army Chemical, Biological, Radiological and Nuclear School; **USACC**—U.S. Army Cadet Cmd.; **USACE**—U.S. Army Corps of Engineers; **USAIS**—U.S. Army Infantry School; **USAJFKSWC**—U.S. Army John F. Kennedy Special Warfare Center; **USALSA**—U.S. Army Legal Services Agency; **USAR**—U.S. Army Reserve; **USARC**—U.S. Army Reserve Cmd.; **USAREUR**—U.S. Army Europe; **USARJSTSC**—U.S. Army Reserve Jt. and Special Troops Spt. Cmd.; **USASFC(A)**—U.S. Army Special Forces Cmd. (Abn.); **USF-A**—U.S. Forces-Afghanistan; **USF-I**—U.S. Forces-Iraq; **USSOCOM**—U.S. Special Operations Cmd.; **XO**—Executive Officer.*

U.S. Army/SGT Daniel Schroeder

Army SGT Cliff Aughe, a flight medic with Company C, 1st Battalion, 171st Aviation Regiment, New Mexico Army National Guard, attends to an Afghan soldier during an evacuation mission in March.

Belvoir, Va., since September 2010.

CW5 Wilson holds a master's degree in management from Webster University. A native of Barberton, Ohio, she is married, with three sons serving in the active military.

Flight Medic Training. Medics from the Army National Guard are among the first to take part in a new program designed to revamp the training of flight medics throughout the Army.

Currently, a qualified combat medic in a flight medic slot can be a flight medic, but the requirements are changing. Flight medics, according to MSG Kym Ricketts, chief medical noncommissioned officer with the Army National Guard, need additional training because "they do a higher standard of care and in a different environment than a line medic on the ground."

The program, taught at Fort Sam Houston, Texas, includes paramedic and critical care training and certifications. Soldiers training for flight medic duty pass through three phases: First, the flight medic phase can be waived in place of on-the-job training.

The second, and longest, phase is the nationally registered paramedic course, and the last focuses on critical care transport.

Much of the impetus for the program was the result of a study done on a California Army National Guard medical evacuation unit that deployed to Afghanistan with national certification as paramedics that helped inspire the training program and proposed changes to flight medic requirements. The study determined there was a 66 percent higher survivability rate with full-fledged paramedics serving as flight medics than with combat medics performing the role.

The pilot program ends later this year and will then be reviewed.

National Monument. President Obama recently designated nearly 15,000 acres of Fort Ord, Calif., as the country's 17th national monument.

The monument designation bans mining and geothermal development in the rural, undeveloped eastern half of the base but will not preclude business development on the western part of the property. The designation does provide additional protection to about 7,200 acres cleared of ordnance and chemicals and managed by the federal Bureau of Land Management (BLM). Cleanup of another 7,400 acres currently managed by the Secretary of the Army is under way and will continue through 2019. That parcel will then be transferred to the BLM.

Cars will be permitted only on designated roads within the monument, but off-road vehicles will be barred from the area. The 86 miles of biking, hiking and horseback riding trails along the Central Coast will remain open.

Warrior Games Update. The Army excelled in several sports at the 2012 War-

Army Casualties in Afghanistan

The following U.S. Army soldiers were reported killed supporting Operation Enduring Freedom from May 1 to May 31, 2012. All names have been released through the Department of Defense; families have been notified.

2LT Tobias C. Alexander, 30
CPT John R. Brainard, 26
MSG Gregory L. Childs, 38
CPT Bruce K. Clark, 43
SPC Junot M.L. Cochilus, 34
SGT Nicholas M. Dickhut, 23
SPC Arronn D. Fields, 27
SSG Thomas K. Fogarty, 30
PFC Dustin D. Gross, 19
SSG Zachary H. Hargrove, 32
SPC Alex Hernandez III, 21
SPC Vilmar Galarza Hernandez, 21
SGT Michael J. Knapp, 28
SGT Jabraun S. Knox, 23
SPC Chase S. Marta, 24
PFC Richard L. McNulty III, 22
PFC Cale C. Miller, 23
2LT Travis A. Morgado, 25
SSG Israel P. Nuanes, 38
CPL Nicholas H. Olivas, 20
CPT Jesse A. Ozbat, 28
CW5 John C. Pratt, 51
2LT David E. Rylander, 23
SGT Jacob M. Schwallie, 22
SPC Tofiga J. Tautolo, 23
1LT Alejo R. Thompson, 30
SGT Brian L. Walker, 25
SPC Samuel T. Watts, 20

Some of the Biggest Reasons to Stay On Post Are Also the Smallest.

At IHG Army Hotels, we believe military personnel should be as close to their families—and their jobs—as possible. That's why our hotels are located right on post. Enjoy our comfortable rooms, complimentary breakfast, concierge service, and free on-post shuttles. You can even bring your pet along, since they're also part of the family.*

Our rates are pretty small, too.

Imagine all that comfort at rates that are 20-30% off per diem for official travel.**
To learn more, go to IHGArmy.com

IHG ARMY HOTELS

The right place to stay is right on post.

IHGArmyHotels.com
877.711.TEAM (8326)

IHG Lend Lease
©2012 InterContinental Hotels Group. All rights reserved. IHG Army Hotels are independently owned by Rest Easy, LLC, an affiliate of Lend Lease (US) Public Partnerships, LLC, and operated by an affiliate of IHG. *A small non-refundable fee may apply. **Rates for official travel vary by post but average 25% off per diem rates. Does not apply to unofficial or DV0 rates.

2012 AUSA

ANNUAL MEETING AND EXPOSITION

A Professional Development Forum

22-24 OCTOBER 2012

Walter E. Washington Convention Center, Washington, DC | www.ausa.org

FOR MORE INFORMATION CONTACT:

AUSA, Industry Affairs

1-800-336-4570 • 703-841-4300 • Fax: 703-243-2589

rior Games in Colorado Springs, Colo., in May, when Army veterans and soldiers amassed 62 medals: 18 gold, 19 silver and 25 bronze.

Army athletes won six gold, five silver and seven bronze medals during the track and field events. Among them were SSG Michael Kacer, U.S. Army retired, who served in the military more than 10 years until injured by a rocket in Afghanistan. He took home a silver and three bronze medals. SGT Monica Southall, wounded in 2009 in Afghanistan, won the gold medal for her 37-foot throw in the women's shot put. Army women swept the upright cycling competition, adding three medals to the total count, and the men's recumbent bike team took a gold and a bronze. CPT William Longwell finished first in the 10K hand cycle event with a time of 20 minutes, 54 seconds. Wounded warriors collected another three medals in the shooting competition. The Army topped the Marines in two team events, winning the sitting volleyball competition and taking the gold in wheelchair basketball.

The Warrior Games were created in 2010 as an introduction to Paralympic sports for injured servicemembers and veterans, and many soldiers say they relish the return to competition.

Reducing Sexual Violence. At the I.A.M. Strong Sexual Harassment/Assault Prevention Summit held in May, the Army acknowledged that sexual harassment and sexual assault continue to be problems and urged soldiers to take action against them.

"We need to eliminate the prevalent bystander mentality," said Army Chief of Staff GEN Raymond T. Odierno. He also said that soldiers who do not assist those who they think might be at risk of assault or who fail to confront soldiers who might engage in harassment or assault are part of the problem. He said he will ask each commander to conduct a command climate survey within the first three months of taking command, again at six months, and then every year.

SMA Raymond F. Chandler III also spoke to the more than 500 commanders and sergeants major who attended the summit. The focus, he said, must be on "changing the culture within our Army" and understanding that this type of behavior is not acceptable.

NIE Tests. Network Integration Evaluation (NIE) 12.2, the third in a series of semiannual tests of equipment under real-world conditions, took place in May and June at White Sands Missile Range, N.M. More than 4,000 soldiers of 2nd Brigade, 1st Armored Division, conducted the network field exercise across an area the size of Delaware.

Measuring the performance and operational value of advanced tactical communications equipment, soldiers of the 2nd Brigade strove to maintain network connectivity as units maneuvered through heat and dust across a mountain desert with a complex mix of elements, including the army, insurgents and civilians of the fictional country of Attica. To simulate the brigade's operating within a larger organizational formation, the 101st Airborne Division served as the headquarters element, issuing orders and monitoring operations over the Warfighter Information Network Tactical (WIN-T) network from Fort Campbell, Ky.

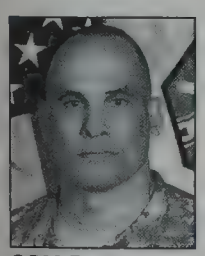
NIE 12.2 is the final chance to check and evaluate Capability Set 13, the first integrated group of networked technologies that will be fielded to brigade combat teams beginning this fall. Anchored by the WIN-T Increment 2, Capability Set 13 is a major upgrade in tactical communications that will extend satellite communications to the company level and allow mission command on the move. ★

COMMAND SERGEANTS MAJOR CHANGES*

CSM J. Carabello from 3rd BCT, 10th Mtn. Div., Fort Drum, N.Y., to MCoE and Fort Benning, Ga.

CSM K.J. Groninger from 579th Engineer Det. (FEST-M), Vicksburg, Miss., to USACE Cmd., Washington, D.C.

CSM B.L. Knight from 1st Stryker BCT, 25th Infantry Div., Fort Wainwright, Alaska, to USARAK, Fairbanks, Alaska.



CSM B.E. Maier-itsch from IMCOM-Europe, Germany, to U.S. National Spt. Element Cmd.-Afghanistan.

CSM R.D. Ward from 130th Engineer Bde. to USACE, Transatlantic Div., Winchester, Va.

***AA**—Air Assault; **BCT**—Brigade Combat Team; **FEST-M**—Forward Engineer Spt. Team-Main; **IMCOM**—Installation Management Cmd.; **JB**—Joint Base; **MCoE**—Maneuver Center of Excellence; **MDW**—U.S. Army Military District of Washington; **NTC**—National Training Center; **USACE**—U.S. Army Corps of Engineers; **USAFCOM**—U.S. Army Finance Management Cmd.; **USAIS**—U.S. Army Infantry School; **USARAK**—U.S. Army Alaska; **WTC**—Warrior Transition Cmd.*

*Command sergeants major positions assigned to general officer commands.

AUSA Membership Benefits*

Bank of America, N.A.:
AUSA Bank Card
Start receiving great rewards and show your support for AUSA. Call 866-438-6262.

Institute of Land Warfare:
ILW offers writing programs; conducts conferences and symposia; publishes essays, Defense Reports, newsletters; and provides research on defense issues. Call 800-336-4570, ext. 4630 for details.

AUSA Mastercare Group Insurance Plans:
- Active Duty & Retiree TRICARE Supplement
- Accidental Death and Dismemberment Plan
- 10-Year Level Term Life Insurance Plan
- Group Term Life Insurance Plan
- Short-Term Recovery Plan
- Long Term Care Plan

Call 800-882-5707 for more information.

Dental and Vision Discount Plans:
Discounts offered to AUSA members on dental services and vision exams. Call 800-290-0523.

This plan is not available in the states of MT and VT.

Emergency Assistance Plus:
If you or a family member gets injured or sick while on travel, this plan will provide medical assistance, bring a medical specialist or loved one to your side and much more. Call 888-633-6450 for more information.

Government Vacation Rewards:
AUSA now offers its members discounts on cruises, resorts and tour providers. Call 866-871-9181.

GEICO Insurance – Auto, Home, Condo/Renters, and Boat:
In states where available, a special member discount may apply. Call 800-861-8380.

Apple Member Purchase Program:
Apple Computers offers AUSA members a substantial savings on its computers. Call 800-MY-APPLE and mention you are a member of AUSA.

Book Program:
Members receive discounts on selected military books.

Army Times/Federal Times:
Subscription discounts on Army Times/Federal Times. Call 800-368-5718.

Dell Member Purchase Program:
AUSA members can now receive discounts on Dell PCs. Call 800-695-8133 for more information.

AUSA Career Center:
AUSA members can now post their resumes and employers can advertise any new openings they have. Visit our Web site and go to the Resources drop-down, then Career Center.

University of Maryland University College (UMUC):
University of Maryland University College (UMUC) is pleased to offer undergraduate and graduate study programs to AUSA members worldwide. For some program participants, a discounted tuition rate will apply.

Armed Forces Services Corporation:
AFSC guides you through the details on military entitlements for your retirement and survivor planning/assistance for your spouse. Call or e-mail: 888-237-2872, info@AFSC-USA.com.

Choice Hotels International®:
AUSA members can receive discounts on hotel rooms at the following hotels.
- Comfort Inn®
- Comfort Suites®
- Quality®
- Sleep Inn®
- Clarion®
- Cambria Suites®
- MainStay Suites®
- Suburban Extended Stay Hotel®
- Econo Lodge®
- Rodeway Inn®

Call 800-258-2847 and use the code 00800700.

Car Rental Program:
Use the reservation codes on the back of your membership card and save at:
- AVIS 800-331-1441
- Budget 800-455-2848
- Alamo 800-354-2322 *(rental for under age 25 available)*
- Hertz 800-654-6511
- National 800-Car-Rent

Publications:
- *ARMY* Magazine every month, including the October *ARMY Green Book*.
- *AUSA NEWS* every month.

* **Member discounts and services are subject to change.**

For more detailed information, visit Members Only Benefits and Services at www.ausa.org
or call Member Support at 855-246-6269 / 703-841-4300

History Lessons

By GEN Frederick J. Kroesen
U.S. Army retired

The end of World War II and the precipitate and devastating dismantling of the American armed forces led, by 1947, to some serious rethinking of our national strategy and the requirements for the military capabilities to support it. There had been a slow realization of two important factors affecting world affairs: first the threat to world peace and security posed by the promoters, adherents and drivers of the communist world, the Soviet Union; and second, the potential of the unbridled economic power of American industry, no longer limited by wartime demands.

Curiosity about parallels of that time with today's world prompted a review of the Mutual Defense Assistance Act of 1949, the National Security Council Report 68 (NSC-68) of 1950 and a special defense study entitled "Rearming at the Dawn of the Cold War" covering the period 1949 to 1952, published while President Harry Truman was still in office.

President Truman, conscious of the economic downturn that followed World War I, was determined to hold government spending under control, and he decreed a limit on defense spending that ensured only a meager military establishment. He agreed only reluctantly to the proposals made in those three documents; then the outbreak of the Korean War found us completely unprepared, and defense spending had to almost triple in his last year in office.

Given that situation, the studies that had been completed took on considerable importance, and the demands for defense had to be attended. The overall purpose of the thinkers then was seen as fourfold:

- A reexamination of national objectives.
- Acknowledgement of the strength, determination and capabilities of the communist hierarchy and the threat they posed, the principal concern being the threat of atomic and potential thermonuclear weapons and the possibility of their development or acquisition by the Soviet Union.
- An assessment of the strengths, weaknesses and intentions of our allies.
- An appraisal of the military establishment needed to cope with the existing and projected situation.

Summing up the national objectives of that era identifies that little differed from those appropriate for today: Guarantee the continuing independence of the United States and the freedom of its people; achieve international peace and security; promote peace and security in furtherance of the purposes of the United Nations; and establish international agreements to achieve control of weapons of mass destruction.

The threat, then described almost singularly in terms of Soviet and communist expansion aims, has changed regarding the identities of perpetrators and tactics being employed but not regarding the determination of a nebulous leadership to conquer the world for a differing ideological concept. It has also been modified by the spread of nuclear bomb technology and the development of more capable, more deadly delivery means. The aim of preventing proliferation of nuclear weaponry has not changed, but the lack of success to this end is still not promising, and the world lives in dread of a next demonstration of the impact of a nuclear explosion.

The assessment of the strengths, weaknesses and intentions of our allies has evolved and expanded markedly from the focus on Western Europe and the NATO nations to concerns much more widespread around the globe. Perhaps principal among them are the Islamist intentions among the Muslim immigrants in the West, the aspirations of China in Asia and the Western Pacific, and the budding anti-American coalition forming in Latin America. All have associated military connections, and some have aspirations for weapons of mass destruction, if not capabilities. The intentions of our allies to resist are almost completely tied to their expectation and reliance upon our willingness and ability to support their aims.

All of the above provide thoughts for the continued political attention demanded by our responsibility to lead, perhaps to guarantee, world order. NSC-68 states: "Our position as the center of power in the free world places a heavy responsibility upon the United States for leadership. We must organize and enlist the energies and resources of the free world in a positive program for peace."

But it is that fourth segment of our overall purpose that demands the attention of our military leaders today: The determination of what military establishment is needed to cope with the world situation. Parallels are almost startling. First, even during the Korean War and with the expressed intent of ensuring the defenses of Western Europe, the thinkers provided that "direct commitment of American combat forces is out of the question and never envisioned involvement of assets other than naval forces to secure the sealanes and strategic air earmarked for strategic bombardment." Strategic airpower and nuclear weapons would bear the major burden of the nation's defense. Navy super-carrier production would be cancelled and the Army reduced by 100,000 soldiers.

The observation lately expressed by former Secretary of Defense Robert M. Gates—that the role of the Army in the future would be limited to the training and preparation of allied armies to fight the land battle—is not a new

thought. The adoption of the new air-sea battle strategy by Secretary of Defense Leon E. Panetta is only the latest economy-driven explanation that firepower will suffice to secure our national interests.

It is now approximately 70 years since our leaders first determined that nuclear warheads delivered by air were the guarantee of achieving our national goals and protecting our national interests. Since that time we have not employed an atomic warhead, but the conflicts in Korea, Vietnam, Grenada, Panama, the Persian Gulf, Iraq and Afghanistan have required large numbers of soldiers and marines as the decisive factor in the control of the land and the domination of the occupied population. We settled for less than complete victory in a number of those conflicts but never because our ground forces were found wanting. There is something ironic about how, when we declare peace at hand, we also declare that the Army and Marine Corps will have only a minor role in any future conflict and therefore a reduction of their strength is in order. Air, naval and now Special Operations forces will suffice to satisfy our future needs.

Since World War II, only Presidents Kennedy and Reagan seem to have understood the need for ready landpower, and the forces that Reagan nurtured ended victorious campaigns in Panama and the Persian Gulf not long after their commitment. It cost a lot less in the long term to have adequate and ready forces to meet a crisis than to create them later or to fight a war with forces too small.

NSC-68 provides three significant thoughts.

- The issues that face us are momentous, involving fulfillment or destruction not only of this Republic but of civilization itself.
- For a free society, there is never total victory, but defeat at the hands of totalitarians is total defeat.
- No people in history have preserved their freedom who thought that by being strong enough to protect themselves they might prove inoffensive to their enemies. Our fundamental purpose is more likely to be defeated by a lack of will to maintain it.

It would be comforting to know that our military planners have those thoughts as well as the history of our military campaigns in mind as they prepare for the future. □

***GEN Frederick J. Kroesen**, USA Ret., formerly served as Vice Chief of Staff of the U.S. Army and commander in chief of U.S. Army Europe. He is a senior fellow of AUSA's Institute of Land Warfare.*

Back to the Future: Retaining Reservists in an Era of Limited Funding

By COL Gary C. Howard
U.S. Army Reserve retired

A popular World War I song asked, "How ya gonna keep 'em down on the farm after they've seen Paree?" That question sums up what LTG Jack Stultz and LTG Jeffrey W. Talley, former and current Chief of the Army Reserve respectively, have been wondering for some time now. More than 150,000 Army Reserve soldiers have been activated and deployed—some multiple times—to perform their wartime service in Iraq or Afghanistan. How can we keep these experienced soldiers in the service once they return to their home Reserve center?

It's an important question. The planned drawdown of the active component will make the reserve components even more important for our national defense. There is no other ready reserve in case of an unanticipated requirement, so the stakes are high.

The question highlights a number of issues, most of which, interestingly, are exactly the same as they were 10 and 15 years ago. How do we train and retain soldiers within the real-life constraints of the Army Reserve, and how do we do it with less than what we have had for the last decade? With the two wars winding down and a renewed emphasis on the federal budget deficit, there will be less funding for everything. Given the DoD's plans to shrink the size of the Army, the Army Reserve will likely be affected. Of course, an austere funding environment is familiar ground for the Army Reserve. The organization has operated with limited resources throughout much of its existence. In fact, the cost-effectiveness of the Army Reserve is one of its strongest selling points.

For the last decade, the Army Reserve has focused on deployments and transformation to an operational reserve. Many aspects of the operational reserve are valuable, including ready units and soldiers for deployment, predictability for Army Reservists, and an enhanced realization that deployment is possible and even likely. Yet the cost of bringing a significant number of units and soldiers to readiness for deployment just in case they might be needed is probably more than we can afford. Preparing units that have been slated for deployment makes sense; running multiple units through the whole process just in case they might be needed does not. Finally, the threat of continuing deployments and the intense preparation in case they might be needed are very likely to erode the support of individual soldiers and civilian employers.

Given these concerns, how can we continue to transform the Army Reserve to match the new reality and retain soldiers? Here are some things to consider.

Improve Training Planning Capability

LTG Stultz and LTG Talley have advocated the use of Army Reservists in

Army missions that are long-term and predictable around the world. They're right: Real-world missions are a huge plus for retention, and with the active component downsizing, more mission opportunities are likely for the Army Reserve, but will there be sufficient planning capability to make that happen?

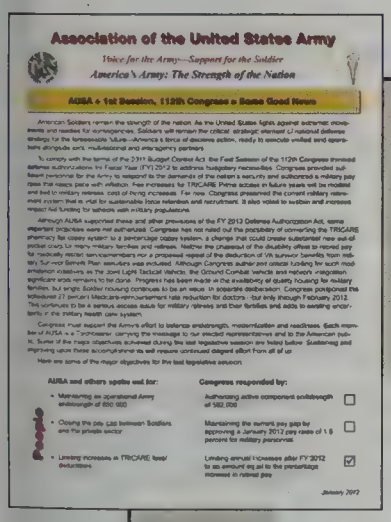
Lack of an effective organization for planning and evaluating training has hampered the Army Reserve for a long time, though not for lack of trying. In the past, First Army or Fifth Army held yearly training conferences for units, but in reality these provided little useful guidance. In their day, Army Reserve commands and regional support commands—two-star commands with geographic oversight of Reserve unit training—arranged annual training opportunities for their assigned units, but they were often overwhelmed by the responsibility for more than 100 units each. Functional commands tried to assist. For example, the former 143rd Transportation Command provided guidance to transportation units in finding high-quality collective training. They and other such headquarters, however, were staffed primarily by Army Reservists themselves, and thus they had only a limited capability for training evaluation and planning. Today, with even fewer senior commands, there is even less planning capability.

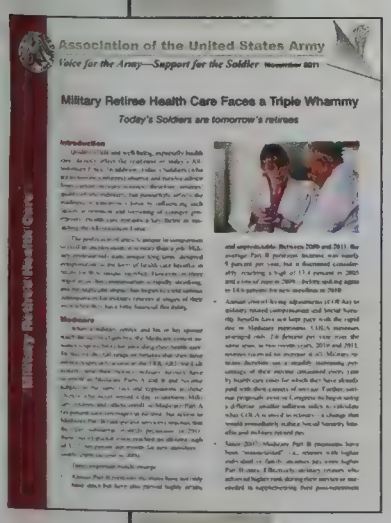
The Army Reserve should consider a serious investment in training planning at multiple levels. Higher headquarters, with their connections to doctrinal schools and headquarters, are vital to high-quality collective training. In addition, full-time unit manning is important for the normal battle assembly weekend training. While the Army Reserve has installed company commanders from the active National Guard/Reserve program, those are few. Most of the unit full-time support has been at the lower grades. The U.S. Marine Corps Reserve—an interesting model—assigns active component marines as deputy company commanders and includes enough regular marines so that the reserve marines are able to focus fully on weekend training. By adopting this model for training planning and oversight, active component soldiers would be assigned to Reserve units to encourage cross-fertilization and a better understanding of the two cultures. To make it worthwhile to the active soldier, assignment with a Reserve unit would be valuable for promotion purposes.

Solve the Problems of Geography And Time

Although real-world missions are ideal training and simulation can fill some of the Army Reserve training gaps, most Reservists spend most of their available training time in the drill center. The challenges are the same as they have been for years: geography and time.

Geography has always plagued the Army Reserve. Qualifying soldiers to train is the first requirement for effective training. The active component simply moves soldiers to wherever they are needed. Army Reservists must


Association of the United States Army
Voice for the Army—Support for the Soldier
America's Army: The Strength of the Nation
AUSA • 1st Session, 112th Congress • Some Good News


Association of the United States Army
Voice for the Army—Support for the Soldier November 2011
Military Retiree Health Care Faces a Triple Whammy
Today's Soldiers are tomorrow's retirees

Help AUSA continue to be the Voice for America's Army

The Institute of Land Warfare (ILW), the educational arm of AUSA, publishes papers and Torchbearers that educate the Administration, Congress and the general public on issues directly affecting America's Army and our Soldiers.

The printing of these papers costs money and ILW, as a non-profit, must depend on contributions. Help ILW continue to ensure that America has the strongest Army possible and that our Soldiers are taken care of.

For more information, please contact Millie Hurlbut at 703-907-2679 or mhurlbut@ausa.org.

THE INSTITUTE OF LAND WARFARE • AUSA •

adapt to locally available units or pay their own way (and are not reimbursed) to travel to a more distant unit.

Finding time to train has always been an issue. Administrative tasks have traditionally consumed much of the available training time. Improvements in personnel records handling have helped, but training time is still short.

Numerous solutions have been suggested in the past: Pay Army Reservists for travel to drills, adjust the training schedule to include some drill weekends of three and four days rather than two, focus collective training into more than one annual training event.

Leverage the National Guard

Training with other organizations can be very helpful on drill weekends. Working with the other services—especially the Marine Corps Reserve—adds realism and interest. Army National Guard units would seem to be a natural fit, and National Guard units are virtually everywhere. This would effectively more than double the number of soldiers available for training. For example, the California Army National Guard alone is authorized 18,000 soldiers. Can we encourage this kind of joint training? When deployed, units and soldiers from these two organizations would be working together. In addition, the current National Defense Authorization Act gives the Army Reserve and the Army National Guard responsibilities in homeland defense under Title 10 of the U.S. Code.

The New Reality

Today's new reality, coming on the heels of more than 10 years of war, offers opportunities to reexamine how we do business. Real-world missions and new training simulators are great for maintaining skills and retaining soldiers. The drawdown of the active component might mean more opportunities for Army Reserve soldiers to take on interesting and challenging real-world missions. The same budget constraints that limit the size of the active component, however, might limit Reserve involvement.

More importantly, we cannot let these intriguing opportunities distract attention from the real problem. The fact is that most Army Reserve soldiers spend most of their careers at their home reserve center, too often at some distance from effective training centers and vital doctrinal guidance. We need to continue to look for new solutions to those old problems. □

***COL Gary C. Howard**, USAR Ret., was commander of the 1397th Transportation Terminal Brigade at Mare Island, Calif., and served in battalion and company command and staff assignments in 10 units in four states. COL Howard is the principal scientific editor for an independent biomedical research institute affiliated with the University of California, San Francisco. He has a Ph.D. in biological sciences from Carnegie Mellon University and has published numerous articles in scientific and military publications.*

The Loyal Translator Dilemma

By MAJ John W. Davis
U.S. Army retired

American soldiers engaged in combat in the Netherlands in World War II were cheerful friends of Dutch youth but reluctant to trust adults because it was widely believed that Dutch resistance was thoroughly compromised by German counterintelligence. Any translators could be spies or, worse, saboteurs who would lead Allied soldiers into ambushes.

Our Army once again finds itself with a dilemma regarding linguists. It comes down to this: Can our soldiers trust the man who is telling them what the locals are saying? What can the Army do to ensure that we can deploy numerous, capable and loyal linguists in future conflicts?

Every war demands great linguistic skills. America can be proud of the Nisei Japanese radio operators. Their communications helped save lives and win battles, such as the Battle of Iwo Jima. Cajun French linguists worked endlessly with French civilians and resistance fighters to guide Allied soldiers across Normandy after D-Day. Like the Navajo linguists who quickly transmitted messages in a code developed from their native language, American Jews aided the United States in World War II by serving as translators for Counter Intelligence Corps debriefers in Germany. All of these linguists were devoted soldiers and loyal Americans who embodied a truism: Skilled, culturally attuned linguists are force multipliers, but loyal linguists are battle winners.

Each war's requirements for linguists raise concerns about loyalty. Can we trust this man or woman to properly translate this document, interpret that conversation, advise on the proper cultural approach, completely convey the message or guide the team? If the answer is "I'm not sure," doubt hovers over every action our military takes. Situational awareness should not include doubting or fearing your own translator.

Translators have secretly conveyed messages to prisoners in Guantanamo. Others have falsely advised when translating battlefield intelligence by committing errors or leaving out significant facts. Enemies posing as translators have led convoys into ambushes.

On the other hand, some translators are truly noble, embodying every virtue of a true comrade in arms. They are people you might trust with your life, or for whom you might risk your own life.

What has changed since World War II? The requirements to field many translators are the same, as are the missions. This country, however, cannot find ready, available and clearable linguists who are willing to accept the risks of combat. They are often looked upon by the locals as collaborators or, worse, traitors. How can we motivate linguists to accept these risks and solve the loyal translator dilemma?

Translators are required for virtually every encounter between U.S. forces and local foreign nationals. Linguists are necessary for document exploitation, translation of telephone, radio, computer and other interceptions, and any intelligence activity directed against a foreign element. We must have them or potential actionable intelligence will be abandoned. Every senior officer seeks them for local cultural communications, and this is often when they are most dangerous. The spies know we need them because, as one wryly observed, "The Americans are masters of gathering intelligence, but they don't know what to do with it."

Pham Xuan An was just such a spy who could interpret, analyze and assist with any dilemma faced by newsmen, GIs and, later, senior officers and major news agencies. He was truly a remarkable confidante; when he was not working wonders for the Americans in South Vietnam, his services to North Vietnam as a spy caused even Ho Chi Minh to exclaim with joy, "We are now in the United States' War Room!" Each war has produced someone like this. We are particularly vulnerable because we rely heavily on local hires to communicate with the native populace for us. We trust our vetting to ensure their loyalty.

Traditionally, linguists are recruited from the host country's zones of conflict. These translators are most qualified in localisms, cultural awareness and area knowledge, but they are the least trustworthy. Other linguists are American immigrants, from the Army's 09L interpreter/translator program or the Defense Language Institute. These linguists are often cleared but less trained in cultural awareness, language skill and nuanced appreciation of the conflict area. This complex concern has faced our Army in every war. How can we hope to resolve this dilemma today, knowing we will soon face the same problem in the next conflict?

America is a land of untapped linguistic skills and could be a model to the world in language and cultural development. Those skills, thoughtfully nurtured and developed, could become a national asset. They could make us more aware, sensitive, and competitive, and could be a godsend for our Army's future deployments.

We must be more sensitive to the abilities a linguist deploys. One officer, a master of five southeastern Asian languages, was drawn away from working against active insurgencies because he lacked a mandatory deployment unrelated to the guerilla missions he was fighting. This happened in order for him to attain career development. If his career was not fighting wars for which he was uniquely qualified, then what was? It could be due to a linguist's liaison that an entire Army does not have to deploy. Our Special Forces know the value of such skills. Today they work hard at maintaining such skills in Afghanistan as they once did among the Hmong people.

We can and must employ Americans' linguistic skills as we would any vital national asset. The potential is available. American language immersion schools are one possible source of developing a more linguistically and culturally sensitive population. Such programs "provide instruction in the partner language for a significant portion of the school day," according to The Center for Applied Linguistics (CAL), which lists 410 language immersion programs in 30 states. (CAL's website—www.cal.org—states that U.S. Department of Education funding for updating its directory of such programs ended in 2004.) A linguist, properly employed, is immensely valuable. What we need is a career field for the noncommissioned, warrant and commissioned officer in a language discipline. Employ young, cleared and ready linguistic and culturally trained soldiers only where they are of service to the Army. They will be the Special Forces soldier, the liaison officer, the advisor of host nation armies, the staff advisor or translator of documents. Employ them, as our Special Forces do now, in targeted areas of the world with good cultural training, language maintenance and career paths to achieve victory in the next conflict.

Modern warfare is often characterized by espionage, deception, ambush and subtle ambiguity. Loyal linguists can provide unique support in these situations, making them indispensable to our Army. □

***MAJ John W. Davis**, USA Ret., is a counterintelligence staff officer with the Space and Missile Defense Command, Huntsville, Ala. He served as a combat arms officer with the 101st Air Assault Division and as a linguist and counterintelligence officer.*

THE SEA CALLS TO EVERYONE IN THE FAMILY.
HERE'S HOW TO ANSWER IT ROYALLY.

RoyalCaribbean INTERNATIONAL

BEST FOR FAMILIES
Cruisers' Choice Awards: 2011
Cruise Critic

FUN FOR TOTS
Nurseries are now onboard five ships and counting. Tots 6 to 36 months enjoy TLC in the daytime and evening, at just $8 per hour, per child.

FUN FOR KIDS AND TEENS
Our complimentary, award-winning Adventure Ocean® Youth Program offers interactive programs, multi-room spaces and exciting activities just for kids of all ages.

JUST FOR THE 'BIG KIDS'
While younger cruisers are edu-tained, adults have their own ways to play.

DATE NIGHT DINING
Intimate dining for every taste – classic **Chops Grille** steakhouse, exquisitely upscale **150 Central Park**, **Solarium Bistro** under the stars and more.

BROADWAY AT SEA. JUST $0.
Hit musicals ***Chicago***, ***Hairspray*** and ***Saturday Night Fever*** – at no extra cost.

SIGNATURE SPA SPECIALTIES
A spa with all the latest ways to unwind – Thai herbal massage, seaweed wraps and acupuncture.

©2012 Royal Caribbean Cruises Ltd. Ships registry: The Bahamas. 12029043 • 5/9/2012

SatoVacations Ask about our military discounts! Call 1-877-698-2554

88Ms: Not *Just* Truck Drivers

By BG Stephen E. Farmen

There is a myth that is still promulgated these days in some military circles that suggests 88Ms are just truck drivers. Military leaders and soldiers realize, as we sit at an inflection point for our Army and look to transform ourselves effectively into the 21st century, that nothing could be further from the truth.

As we work to reduce our Army smartly, I suggest we keep things in perspective when it comes to 88Ms and what they mean to our Army. We must resist the temptation to view reducing our population of 88Ms as a quick win for troop reductions. The mind-set that we can grow battle-hardened, multiskilled, tech-savvy 88Ms overnight because all it takes is a license to drive a truck in our Army, is an old myth.

Gone are the days of convoys sustaining forces on a linear battlefield, following the "cat eyes" at black-out drive, driving on the *Autobahn* and I-95, using green, black and white flags to mark the lead and rear vehicles, and using rotating amber warning lights. Today's 88M is expected to be a diplomat, intelligence gatherer, combat lifesaver, sensor on the battlefield, force multiplier, warrior, soldier and leader all at the same time. The fact is that driving a modern tactical wheeled vehicle (TWV) in today's operating environment can be like flying a C-17 considering all the technology and communications in the cab. In addition, judgment and split-second decision making are inherent parts of conducting a tactical convoy. Like our infantry brethren on patrol, convoys are, quite frankly, a movement to contact. Expectations are high for our 88Ms these days, and they conduct their missions outside the wire daily. Clearly, the way 88Ms perform their duties today and the expectations we place on them entail more than simply issuing them truck drivers' licenses.

As we continue to modernize our TWV fleet and envision the wheeled vehicle of the future, the need to grow and optimize our 88M military occupational specialty takes on even more importance. Think next-generation TWVs; intelligence-based, network-integrated platforms; joint light tactical vehicles; integrated night vision; adaptive cruise control; intelligence-based engineering; warning detection; electronic countermeasure; operational communications (enhanced); remote operation and diagnostics; driver visual enhancements; platform-embedded/built-in interactive training; active protection; camera and intelligence feeds/gathering; autonomous movement; unmanned vehicles integrated into convoys in a hybrid formation; interactive touch pad dashboards; and robotics. This is the direction we're moving in, and it will take more than just an 88M truck driver with a license to make this all happen effectively.

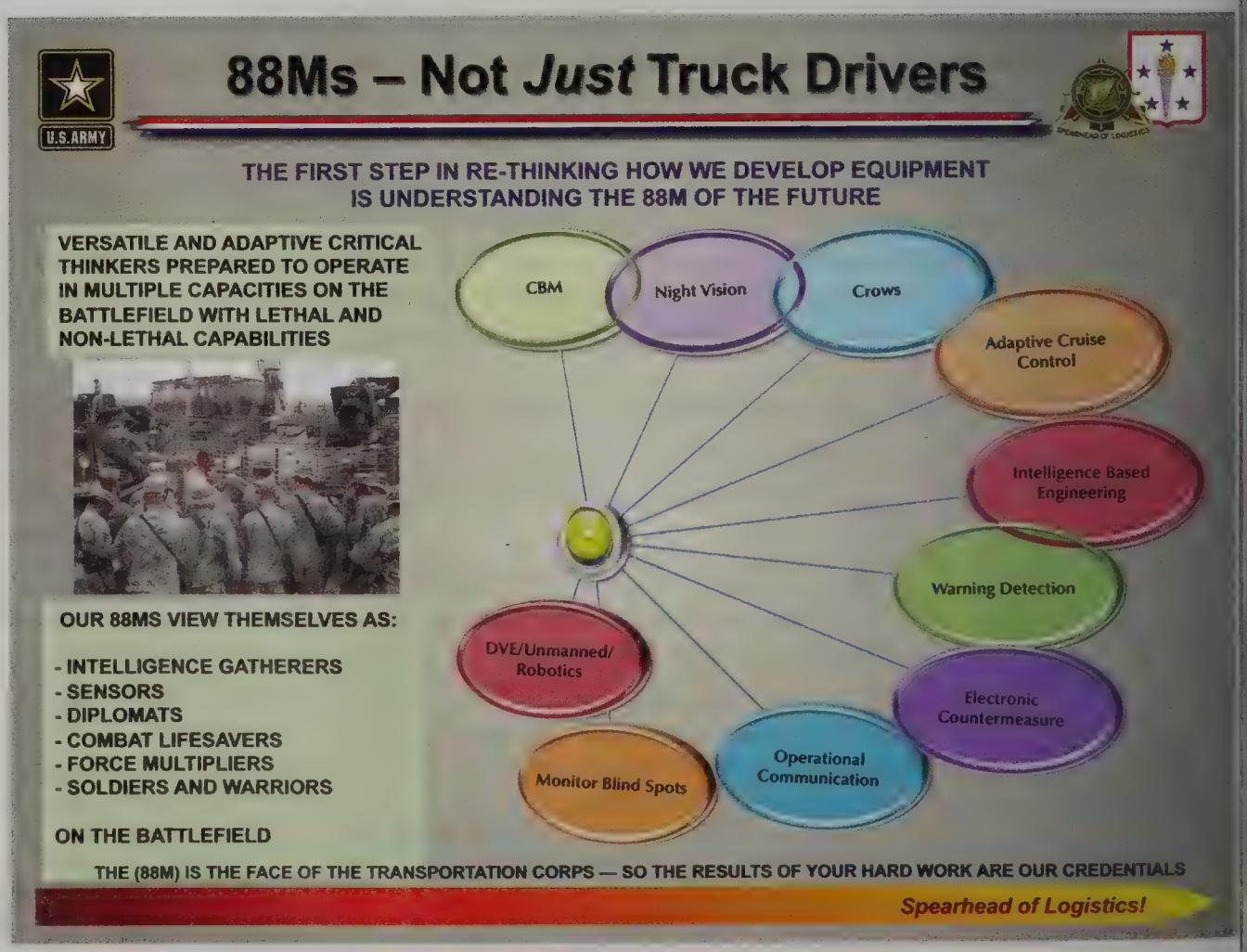
The Transportation Corps is the maneuver element of the Logistics Corps, and the 88M is at the center of gravity for our Army, serving as the connective tissue for executing the distribution fight. Logistics is about connecting the dots and getting things from point A to point B.

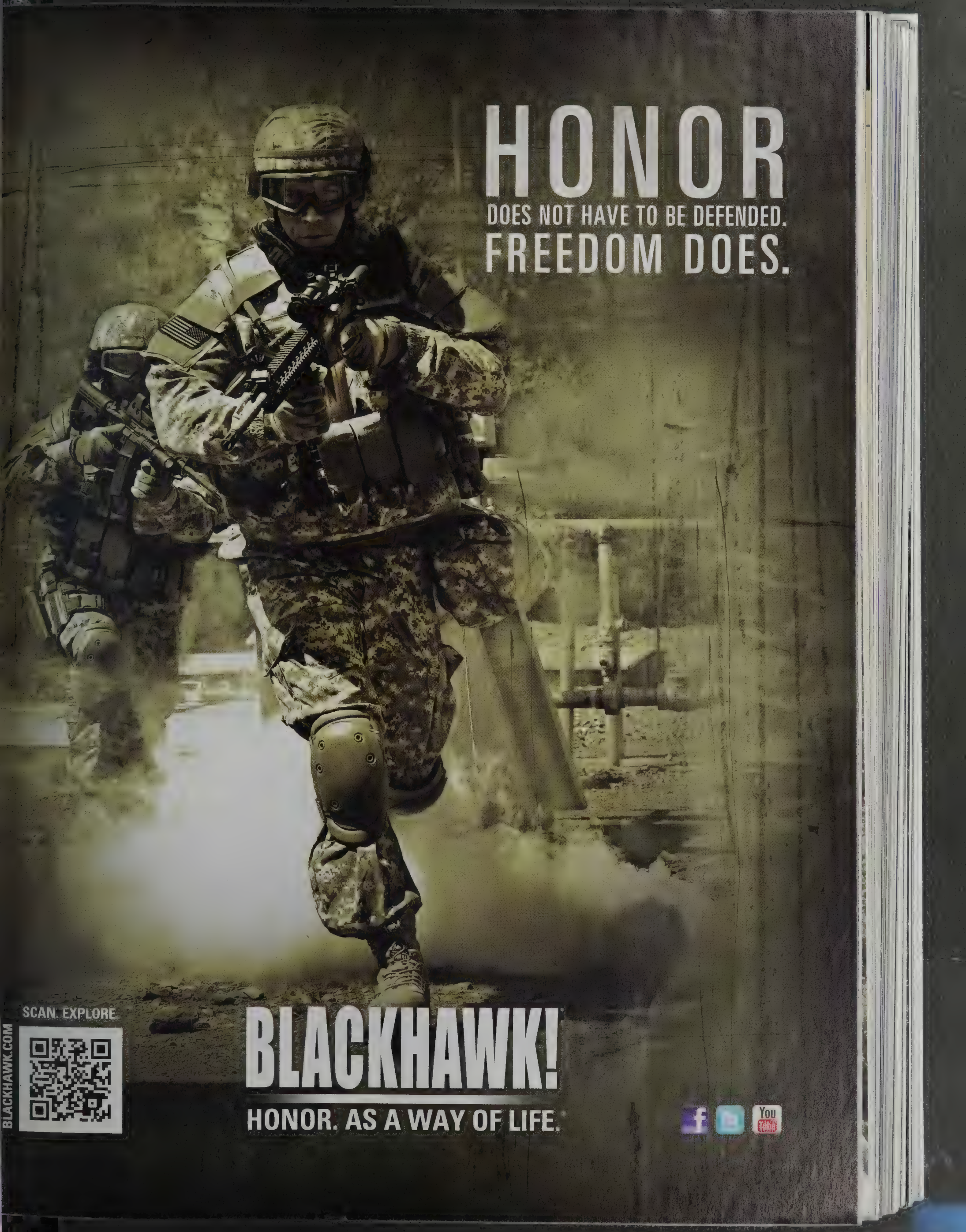
The main ingredient of our success in the distribution fight is a versatile and adaptive critical thinker prepared to operate in multiple capacities on the battlefield with lethal and nonlethal capabilities. That is what we strive to train and grow at our 88M training battalion at Fort Leonard Wood, Mo.

As chief of transportation, I have told the cadre at our 58th Transportation Battalion (responsible for training our 88Ms) that if we are training soldiers to depart AIT thinking they are just truck drivers, then we have failed.

It is time to face the facts: In future parlance our 88Ms are multiskilled transport operators. □

BG Stephen E. Farmen *serves as the 26th Chief of the U.S. Army Transportation Regiment and Corps and commandant of the Army Transportation School, Fort Lee, Va. He held command positions in Operation Desert Storm and in Operation Iraqi Freedom.*




HONOR
DOES NOT HAVE TO BE DEFENDED.
FREEDOM DOES.
SCAN. EXPLORE
BLACKHAWK.COM
BLACKHAWK!
HONOR. AS A WAY OF LIFE.
You

Best Army Tank Crew:

Abrams tanks line up at a Fort Benning, Ga., range for the daytime live-fire event in the inaugural Sullivan Cup competition to select the Army's best tank crew.

The Sullivan Cup Tanker Competition Aims at a Bigger Target

Text and Photographs
By Dennis Steele
Senior Staff Writer

The U.S. Army Armor Center and School at Fort Benning, Ga., hosted the inaugural competition to select the Army's best tank crew in May with the overarching goal of advancing the Armor Corps in the long term.

With the contest theme "Forge the Thunderbolt"—a reference to the lightning symbol on the traditional Armor patch—the Armor Center is using the competition as a line of departure to reset Armor after 10 years of war and prepare the branch for the future. The competition reflected the lessons learned from combat in Iraq and Afghanistan while getting back to tanker basics, especially precision gunnery.

Over four days, 15 tank crews representing individual armor brigades from throughout the force vied for the Sullivan Cup, named in honor of GEN Gordon R. Sullivan, U.S. Army retired, the 32nd Army Chief of Staff and a tanker. Currently, GEN Sullivan serves as president of the Association of the U.S. Army.

At right and below, crews work to assemble a track section during the maintenance event of the best tanker competition.

The contest was composed of 12 scored challenges, which included crew tasks in Abrams tank maintenance, dismounted operations, live tank gunnery, small-arms proficiency and physical fitness along with tactical simulations that tested individual crew members and the crew as a team.

Based on total points scored, the crew from the 2nd Armored Brigade Combat Team (ABCT), 1st Armored Division, based at Fort Bliss, Texas, captured the Sullivan Cup. The 1st ABCT, 1st Cavalry Division, home-based at Fort Hood, Texas, but currently deployed to Kuwait, placed second; the 3rd ABCT, 1st Cavalry Division, from Fort Hood, placed third; and the 194th Armored Brigade from Fort Benning placed fourth.

Crews were scored on the time taken to complete the challenge.

A crew hauls a replacement track section. The section weighs more than 700 pounds.

The top-placing crews were:

- Representing the 2nd ABCT, 1st Armored Division: SFC Ryan Dilling, tank commander (TC); SGT Zachery Shaffer, gunner; PFC Mark Backer, loader; and PFC Kyle Braun, driver.
- Representing the 1st ABCT, 1st Cavalry Division: SFC Oscar Ayala, TC; CPL Michael Adams, gunner; PFC Grant Vonmoss, loader; and PFC Wesley Foster, driver.
- Representing the 3rd ABCT, 1st Cavalry Division: SSG Lou Rodriguez, TC; SGT Roman Villareal, gunner; PFC Robert Reyna, loader; and SPC Joseph Henry, driver.
- Representing the 194th Armored Brigade: SFC Jason Hansford, TC; SSG Edwin Rodriguez, gunner; SPC Dylan Cornelius, loader; and SPC Brian Blanchette, driver.

At the end, only 19.1 points separated the first- and fourth-place finishers.

Consistency was essential—finishing among the top three crews in a majority of the events with the consideration that day and night gunnery was weighted at 60 percent of the final scores and the other 10 events composed 40 percent of the total points. The better shooters racked up more points.

DEFENDING MORE.
COSTING LESS.
360-DEGREE COVERAGE.
NO GAPS. NO BLIND SPOTS.
On November 17, 2011, MEADS successfully conducted the first-ever 360-degree launch by an air and missile defense system – proving that only MEADS can provide our warfighters with the protection they urgently need. With the increase in ballistic and cruise missile threats, MEADS' advanced capabilities detect, track, and intercept today's threats from any direction with eight times the defended area of Patriot. Defending more and costing less than Patriot, MEADS covers it all.
meads-amd.com
MEADS
INTERNATIONAL, INC

A tank crewman advances during the dismounted small-arms event.

The 2nd ABCT, 1st Armored Division, crew finished among the top three places in eight of the events; the 1st ABCT, 1st Cavalry Division, crew was among the top three in six events; the 3rd ABCT, 1st Cavalry Division, crew was among the top three in four events; and the 194th Armored Brigade crew was among the top three in six events.

This year, the winning difference came in the last event of the competition, day live fire.

SFC Dilling of the winning team said that his crew was third after the night live-fire event but pulled ahead in the day live fire to get the win. The 2nd ABCT, 1st Armored Division team is the top crew in gunnery for the division. Officials said that the most successful among the Sullivan Cup crews were selected through unit competitions.

The top gunnery teams in the Sullivan Cup competition were (first through third, respectively):

- Night live fire: 3rd ABCT, 3rd Infantry Division (Mechanized); 3rd ABCT, 1st Cavalry Division; and 1st ABCT, 2nd Infantry Division.
- Day live fire: 2nd ABCT, 1st Cavalry Division; 81st ABCT, Washington Army National Guard (the only National Guard brigade competing); and 2nd ABCT, 1st Armored Division (providing the winning edge).

Right, crewmen fire M9 pistols for scores. Below, crewmen scan for targets during the dismounted rifle phase.

The competition was organized by the 316th Cavalry Brigade, which is responsible for leader training at the Armor Center and School, and the competition's heavy lifting manpower was provided by the brigade's 1st Squadron, 16th Cavalry.

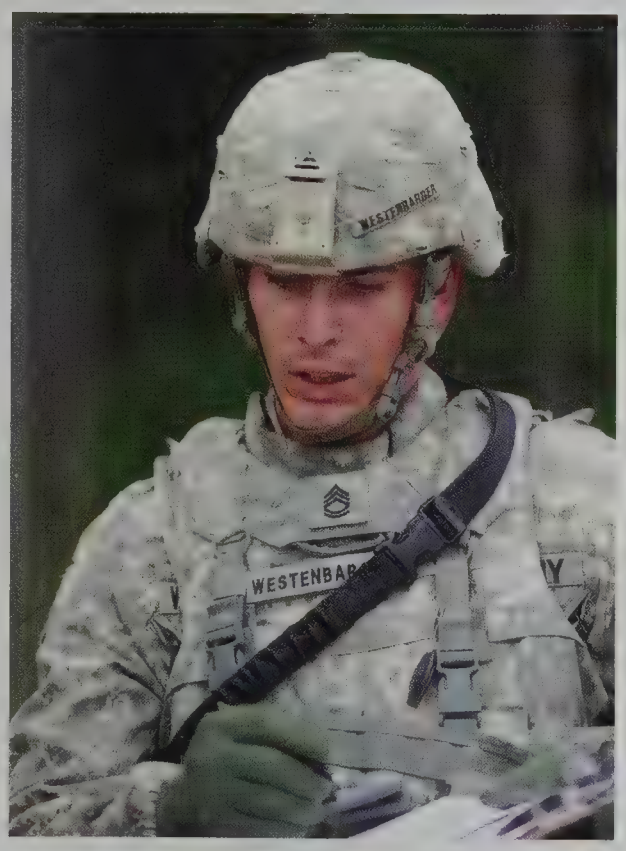
The Armor Center and School recently moved to Fort Benning from Fort Knox, Ky., to join the Infantry Center and School and form the Maneuver Center of Excellence.

Within the Army, there are now many "best" competitions, but a tanker competition until now was not among them. Years ago, there was the Canadian Cup, a competition for NATO tank crews, but it was discontinued. The idea of establishing a best tank crew competition within the U.S. Army began while the Armor Center was at Fort Knox. It became a reality at the center's new home, getting valuable mentoring from one of its new Maneuver Center of Excellence colleagues, U.S. Army Ranger School, which holds the annual Best Ranger Competition, the oldest and best known event in the Army. The Rangers particularly provided advice about gaining sponsors,

Left, the winning tank crew from the 2nd Armored Brigade Combat Team (ABCT), 1st Armored Division, carries a stretcher toward the finish line during the competition. Below, PFC Kyle Braun, driver for the winning crew.

which is necessary for any A-list competition. As a result, the inaugural Sullivan Cup competition was well sponsored by many of the Army's defense industry partners, setting the foundation for continuing success.

Armor leaders said the best tank crew event will grow in coming years because the word will spread among the Armor community. More units will become interested in representation at the competition, with an increasingly higher emphasis on unit competitions sending the top crews to Fort Benning. The event was designed to be the catalyst for what Armor Center officials want to achieve among tankers in the future—a higher standard of basic



Above left, SFC Marc Westenbarger, tank commander (TC), for the 4th ABCT, 1st Armored Division, signs a score sheet. Above right, SFC Ryan Dilling, TC of the winning 1st ABCT, 1st Armored Division, crew waits to start a dismounted drill. Left, GEN Gordon R. Sullivan, U.S. Army retired (center), checks the score totals while having lunch with crews during the competition.

Above, a crew moves to the firing line during the daytime live-fire event. Right, a technician and scorer watch a crew's progress during a simulation event.

tanker skills throughout the armored force, honed at their home stations with emphasis on precision gunnery and the use of training simulators.

Armor officials said that they sense that precision gunnery skills have slipped somewhat during the last 10 years of emphasis on counterinsurgency warfare, a necessary emphasis for the wars in Iraq and Afghanistan.

Keeping with future national strategy as the Army returns to a reset position, precision gunnery and advancing other fundamental armor skills again must receive focus, officials explained. Along with the reemphasis on tanker basics, there are also the realities created by budget cuts, which is why home-station training will be a mainstay to reduce costs within the armored force, especially the use of simulation training, which is far less expensive than conducting the level of field training and live-fire exercises that would be necessary to sharpen armor skills. Hence simulator events

All competing crewmembers were awarded belt buckles and coins.

The winning crew from the 2nd ABCT, 1st Armored Division, accepts the Sullivan Cup and displays Colt M1911A1 pistols, which were awarded for the win. From left, SFC Ryan Dilling, TC; SGT Zachary Shaffer, gunner; AUSA President GEN Gordon R. Sullivan; CSM Jimmie W. Spencer, U.S. Army retired, AUSA's director of NCO and Soldier Programs; PFC Kyle Braun, driver; and PFC Mark Backer, loader.

composed about a quarter of the inaugural competition and why precision gunnery was weighted, setting the tone for the future.

So it is not what the Armor Corps has done in establishing the Sullivan Cup; in the long run, it is what the Sullivan Cup will do for the Armor Corps. ★

AT THE TIP OF THE SPEAR:

Throughout the history of the United States Army, commanders and leaders at all echelons of command, during every war, have recognized the necessity of leading from the front. They have positioned themselves at the decisive point and moment on the battlefield to either maintain or gain a richer situational understanding and, more important, to exercise effective combat leadership through personal presence, force of personality and personal example.

The presence of the commander forward on the battlefield and the willingness to accept the same danger as subordinates have been essential in developing the mutual trust required to succeed during combat operations. Notable historical examples include Stonewall Jackson at Chancellorsville, George Henry Thomas at Chickamauga and Joshua Chamberlain at Little Round Top. More recent examples include Creighton Abrams' leadership during the relief of Bastogne in World War II, Hal Moore's leadership in the Ia Drang Valley and Ray Odierno's actions during the Battle of Taji in Operation Iraqi Freedom.

The need for commanders and leaders to be present at the decisive point and moment on the battlefield has not changed over time. Indeed, the successful application of mission command, along with the trust required between senior and subordinate leaders, calls for the commander's forward presence on the battlefield. As stated by GEN Martin E. Dempsey, Chairman of the Joint Chiefs of Staff, in his April Mission Command White Paper, "Balancing the art of command with the science of control, the commander positions himself as needed to best accomplish the mission." Current and potential future operational environments require the situational awareness (SA) to execute decentralized and distributed operations. The advancement of

Mission Command on the Move In a Networked Force

By COL Michael S. Higginbottom
and
LTC Richard Adkison,
U.S. Army retired

technology, however, specifically the fielding of digital mission command systems and an enabling digital network, present unique challenges. The introduction of digital mission command systems and supporting networks has made possible an ever-increasing concentration of critical information at the command posts (CP) of Army units at battalion and above. Thus the challenge is to enable the commander to continue to execute mission command from forward locations on the battlefield while maintaining an acceptable level of SA and understanding of that which is available in the command post.

Because of the concentration of critical information in the command post, many commanders remain there by necessity in order to maintain access to critical information and the ability to communicate digitally with subordinate, higher and adjacent units. Today, when commanders choose to leave their command posts to move to a critical point during any operation across the range of military operations (ROMO), they knowingly accept reduced levels of connectivity and SA. For them, these reduced capabilities are the price they pay for forward presence.

Although lower tactical Internet capabilities such as Force XXI Battle Command Brigade and Below (FBCB2), Blue Force Tracker (BFT) and such future capabilities as Joint Battle Command-Platform (JBC-P) provide commanders and leaders with a basic level of command and control and SA capability, a significant gap remains between the limited situational awareness and common operational picture (COP) available in the commander's platform (ground or air) and that available at the command post. In addition, current operations have shown that the dismounted leader, regardless of echelon, is even more disadvantaged. Operational feedback received through brigade combat team (BCT) "umbrella weeks," system user juries and operational needs statements (ONSs) consistently emphasize the requirement to extend not only the network but also the required mission command, fires, and intelligence applications and tools to the commander and other leaders when they are away from the command post, both dismounted and mounted and while en route.

Mission-command-on-the-move (MC OTM) capability enables the commander to monitor the COP and maintain SA and communications while away from the CP and moving dismounted or mounted (ground or air). This capability supports the conduct of battlefield circulation and decentralized mission execution by allowing the commander to execute mission command from the best location while making timely and informed decisions in response to changing conditions. MC OTM consists of four separate capabilities: company and below (dismounted and mounted), battalion and above (ground), brigade and above (air), and en route (forcible entry and operational/strategic deployment).

Company and Below

The greatest MC OTM challenge is supporting company-level and below forces, specifically company commanders and platoon and squad/team leaders in the infantry brigade combat team (IBCT). Size, weight, power and cooling (SWaP-C) matters are considerable in these formations. The lack of vehicles in an infantry company dictates the need for a manportable capability that fits in a commander/leader's backpack or on an improved outer tactical vest. Such systems must be power-efficient, and system software and network connectivity must allow the brigade and company commanders to share the COP and allow the company commander to share and exchange situational awareness information, such as friendly and enemy SA, down to squad/team levels. In addition, because only one Humvee is available, integration of MC OTM capability is a significant limitation, and the vehicle may not always be positioned at the right place on the battlefield to support the company commander.

The greatest mission-command-on-the-move challenge is supporting company-level and below forces, specifically company commanders and platoon and squad/team leaders in the infantry brigade combat team.

For the armored and Stryker brigade combat teams (ABCT/SBCT), the MC OTM challenges are less severe than those for the IBCT-based forces, although some remain. These formations can use vehicle-mounted BFT/Joint Capability Release (JCR) for basic situational awareness, but challenges remain with the connection into the wide area network. Warfighter Information Network-Tactical (WIN-T) Increment 2 will provide a beyond-line-of-sight (BLOS) satellite communications (SATCOM) connection down to the company level. It is unclear, however, if it will provide sufficient bandwidth to enable mission command applications and information exchange requirements. Additional work also must be done to integrate a small-form factor broadband SATCOM capability onto the Bradley Fighting Vehicle and Abrams tank. Lastly, when dismounted, the leaders within these brigades, particularly at infantry squad level, face similar challenges as their IBCT-based brethren.

Battalion and Above (Ground)

Formations at maneuver battalion level and above require a vehicular-mounted MC OTM capability, which must be mission-specific in support of the commander and a small battle staff during decisive action operations. The battle staff selected to accompany the commander is at his discretion, although likely candidates would be maneuver, intelligence or fires subject matter experts. Required capabilities include a line-of-sight (LOS) and BLOS Secret Internet protocol router network (SIPRNet), nonclassified Internet protocol router network (NIPRNet), and voice, data and visual capabilities, among others.

Although WIN-T Increment 2 will provide the required network transport and network management capability, a gap remains with regard to providing access to the mission command applications, visualization tools and user input devices required to enable the capabilities previously cited. Ideally, this capability would be resident on the commander's combat vehicle, but since SWaP-C issues exist with the Bradley command vehicle (CV) another vehicle in the ABCTs may be required. The Stryker CV is a potential candidate, although it would represent a unique vehicle signature in the ABCT formation. Another potential platform is a command variant of the armored multipurpose vehicle if the program is accelerated.

The platform for the battalion and BCT commanders in the IBCT is also a challenge. The Humvee, even when armored, has survivability issues and suffers from severe SWaP-C limitations. Alternative platforms such as the mine resistant ambush protected all-terrain vehicle (M-ATV) or the MaxxPro Dash provide a survivable platform with the SWaP-C to support an MC OTM capability and should be considered, although they will create a unique vehicle signature. An appropriate platform for division and corps also must be selected. Again, the Stryker CV is a potential solution, or possibly a category 1 MRAP such as the Caiman multiterrain variant.

Providing commanders a modular capability is an essential design consideration. If the capability is not modular and the platform becomes unavailable because of maintenance problems or hostile fire, the MC OTM capability is lost to the commander. Units have also expressed concern

*COL **Michael S. Higginbottom** is the Training and Doctrine Command Capability Manager-Mission Command (TCM-MC) at Fort Leavenworth, Kan. **LTC Richard Adkison**, USA Ret., is a military analyst in the office of the TCM-MC at Fort Leavenworth. Since 2001 he has worked extensively on Army command post as well as mission-command-on-the-move capabilities.*

PFC Matthew Zajac, US Army, 2nd Infantry Division, Fort Carson, Colorado and his father, Mike, photographed at a Fisher House in San Antonio, Texas.

Fisher House Foundation's Hero Miles program provides military members and their loved ones free round-trip airline tickets, sending them to the bedside of their injured service member recovering at a military or VA medical center. Flights are made possible through frequent flyer mile donations by individual airline passengers.

Since its inception in 2004, the generosity of the public has allowed Hero Miles to distribute more than 25,000 airline tickets, saving our heroes and their families more than $40 million. Help reunite America's heroes with their loved ones by donating your miles today. Your contribution will make you a hero to those in need.

For more information, visit **www.fisherhouse.org** and click on *Hero Miles.*

HERO MILES

The Hero Miles program is grateful to our generous partners, including:
AirTran Airways ★ Alaska Airlines ★ American Airlines ★ Continental Airlines
Delta Air Lines ★ Frontier/Midwest Airlines ★ United Airlines ★ US Airways

Hero Miles is a program of the nonprofit Fisher House Foundation.
More information on the Foundation can be found at www.fisherhouse.org.

©2011 Fisher House Foundation / Brendan Mattingly Photography / Don Schaaf & Friends, Inc.

about the unique antenna signature of MC OTM platforms, so minimizing the antenna signature on these vehicles should also be a consideration.

Brigade and Above (Air)

Formations at brigade and above require a rotary-wing MC OTM capability that mirrors and complements the MC OTM ground capability. Rotary-wing capability is most appropriate at division level and above, when commanders are required to travel greater distances. Brigade operations, air movements and air assault missions across the ROMO would also benefit greatly from this integrated capability. Although an MC OTM capability similar to ground platforms is desired, providing the network connection on a rotary-wing aircraft creates challenges that may require capability trade-offs.

Two systems are currently available that provide an air MC OTM capability: 17 AN/ASC (Airborne Special/Combination Communications)-38 systems from the terminated Army Airborne Command and Control System (A2C2S) program, and approximately 44 of the AN/ASC-15E Airborne Battle Command Consoles. The AN/ASC-38 is broadband capable and can run upper-tactical Internet mission command applications with limitations. It also provides LOS and BLOS voice radios, Iridium phone and the capability to view UAS imagery.

The AN/ASC-15E provides a mission essential capability consisting of lower tactical Internet situational awareness through Blue Force Tracker (and in the future, Joint Capability Release), LOS and BLOS voice radios, Iridium phone capability, and the capability to view UAS imagery. The system currently does not provide broadband SIPRNet or NIPRNet data capability to support upper tactical Internet mission command applications, but the addition of that capability is being explored.

En route Mission Planning and Rehearsal

Joint phased operations dictate the final component of MC OTM, which is the ability to support en route mission planning and rehearsal (EMPR) for both the global response force and other airborne operations, as well as the deployment of senior leaders and staffs during joint forcible entry operations as part of emerging operational access concepts. The capability to support EMPR was identified as a capability gap during Operation Just Cause in 1989 and remains a gap today that XVIII Airborne Corps has continued to reinforce.

Important EMPR capabilities include:

- Receiving continuous updates of the COP.
- Receiving new or modified mission tasking.
- Modifying plans based on new or modified information.
- Receiving and disseminating intelligence updates (unmanned aerial vehicle feeds).
- Coordinating new plans among all operational elements.
- Rehearsing new plans with operational elements.
- Maintaining common situational awareness.
- Synchronizing/integrating combat power and assets.
- Executing joint fires.

An effective EMPR capability must provide both a BLOS SIPRNet data capability to access the network as well as a mission equipment package on the aircraft that provides LOS and BLOS voice communications and the capability to exchange data and enable the appropriate mission command systems between aircraft in the formation. Configurations could include a transit cased or roll-on rack configuration as well as a palletized configuration capable of deployment on C-17 or C-130 aircraft.

Ensuring MC OTM

In the truest sense, an MC OTM capability demands integration. MC OTM cannot be achieved without the integration of the platform, network transport and management, mission command applications, and the visualization and user-interface tools that allow the commander and the staff to effectively see and understand the COP, react to rapidly changing situations and issue the necessary orders (digitally or by voice) to conduct mission command of assigned forces across the ROMO. This is true whether it is a dismounted company commander/leader, a mounted commander in a combat vehicle, a senior leader conducting battlefield circulation in a rotary-wing aircraft, or an airborne BCT or senior staff involved in a forced entry operation. The Army must provide a fully integrated capability.

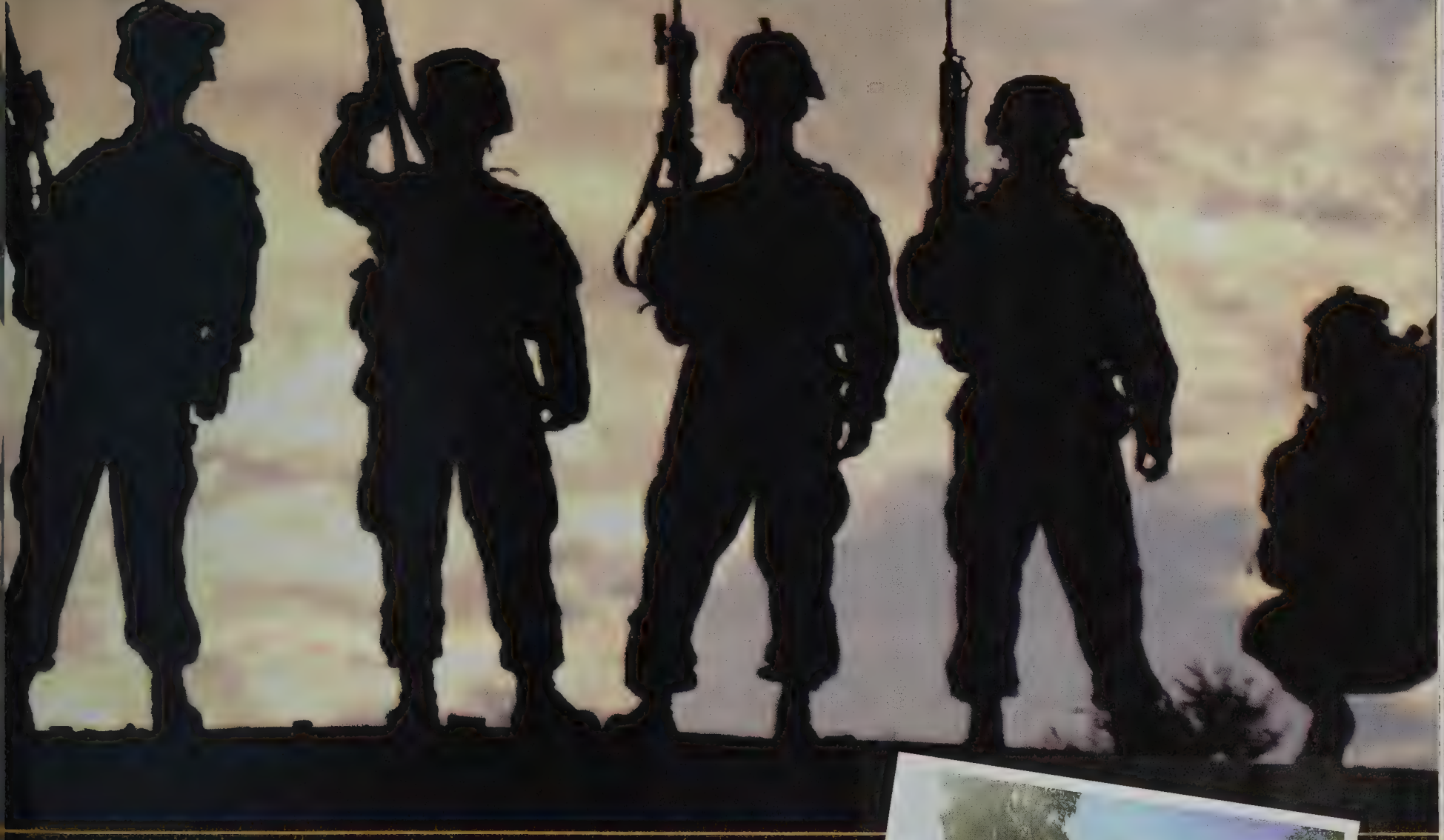
The U.S. Army has a rich and hard-earned heritage of combat leadership by commanders and leaders who exercise personal leadership at the decisive point and moment on the battlefield. The forward presence of the commander on the battlefield remains critical for ensuring mutual trust between commanders and subordinates in executing mission command. While digital technologies enable commanders to attain unprecedented levels of situational awareness, nothing substitutes for the physical and moral presence of the commander on the battlefield.

In his White Paper, GEN Dempsey also emphasizes mission command: "Building trust with subordinates and partners may be the most important action a commander will perform." To build and maintain that trust, our soldiers and partners must see commanders accept danger and adversity with them. Likewise, commanders must often "feel" the battlefield for themselves to deepen their own understanding.

Virtual presence is, in fact, absence. While great strides have been made in the past 10 years to improve the network and the mission command capabilities of the Army's command posts, challenges remain in providing a full MC OTM capability to commanders and other leaders, both dismounted and mounted. Commanders should not have to accept reduced levels of connectivity and situational awareness in order to move. The operational environment has become far too complex. Enabling commanders to conduct the full range of responsibilities inherent in mission command should be the focus in the next stage of network modernization. ★

NATIONAL MUSEUM
UNITED STATES ARMY

Honoring the Army and Its Soldiers

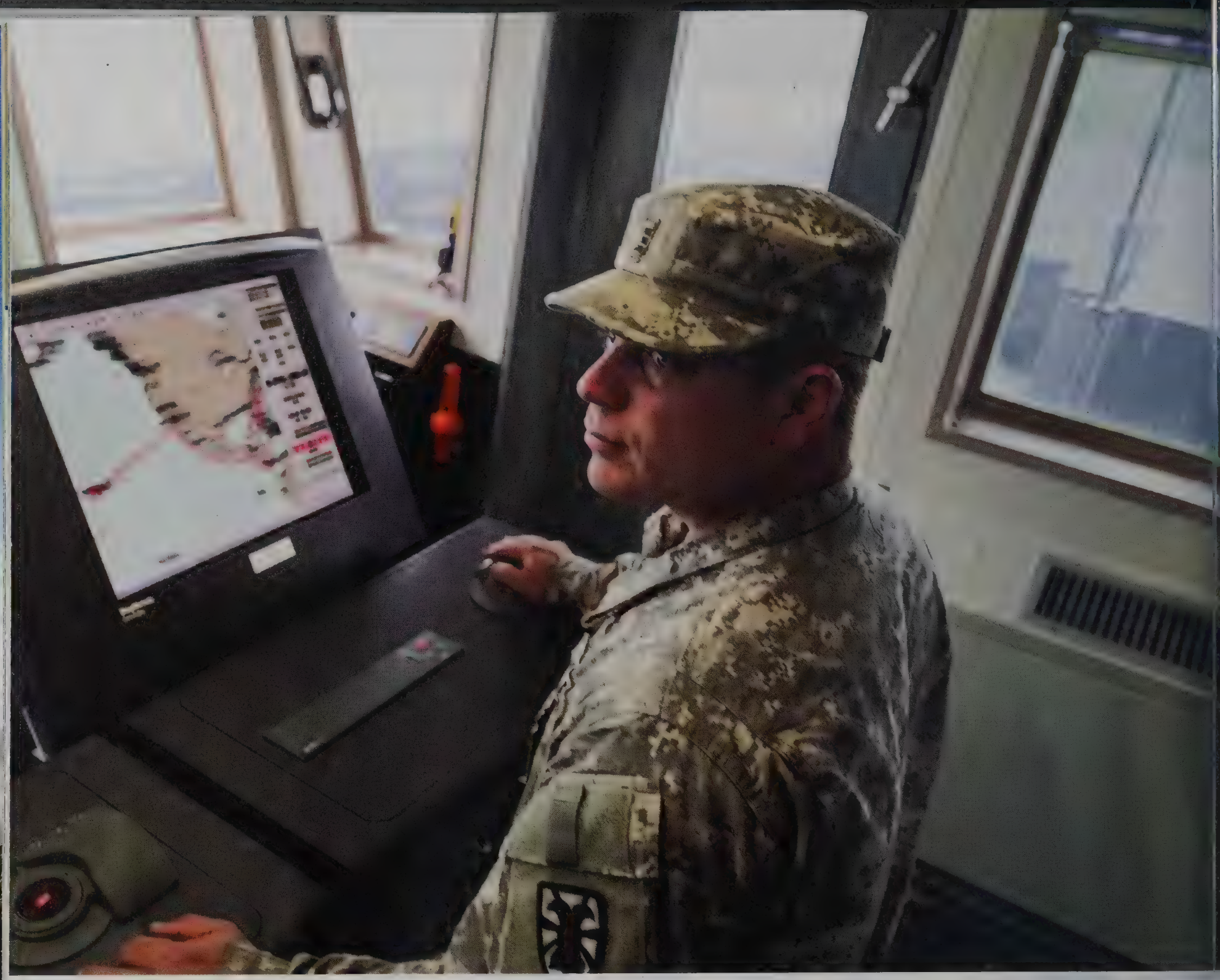


A great Army deserves a great Museum.

The National Museum of the United States Army, scheduled to open at Fort Belvoir, Virginia in 2015 will be the nation's one and only Museum to present the complete Army's history since 1775. Its immersive exhibits, soldier artifacts, and dynamic venues will tell the stories of selfless service and personal sacrifices of the 30 million American men and women who have worn the Army uniform.

For more information on how to support the National Army Museum, visit us online today!

www.armyhistory.org | **1-800-506-2672**



The U.S. Army Warrant Officer Corps

Still a Work in Progress

The Army warrant officer corps continues the evolution that began almost a century ago and that grew over the decades in overall complexion, recognition, responsibility, application and training through legislation, changes in policy and regulations. Today, Army warrant officers are changing their corps and themselves through education and an expanded view of their responsibilities. Largely, today's evolution centers on how warrant officers view their place in the Army—not only serving in their traditional role as master technicians, but increasingly as mentors, leaders and, in cases such as maritime vessel masters, as commanders.

Top left, CW3 Ned E. Walsh, chief mate aboard the U.S. Army's Logistics Support Vessel-4 (LSV-4), the LTG William B. Bunker, *mans the bridge. LSVs are the largest vessels in the Army's fleet. Top right, CW3 Shane Sherrod guides the LSV-1, the* GEN Frank S. Besson Jr., *from a Coast Guard dock as he undertakes a practical exercise during advanced training. Bottom left, CW2 Carlos Rivera, the first assistant engineer of the LSV-1* Besson, *checks the engine room log.*

Photographs and Text
By Dennis Steele
Senior Staff Writer

CW4 Christopher K. Montroy, chief of the maritime operations division (training) at Joint Base Langley-Eustis, Va., explains the direction of maritime warrant officer training to some of his fellow warrant officers.

"The definition of a warrant officer has changed," said CW4 James R. Crouse, the chief marine engineering officer aboard the U.S. Army's logistics support vessel (LSV-4), the *LTG William B. Bunker*, which is an element of the 10th Battalion, 7th Sustainment Brigade, at Joint Base (JB) Langley-Eustis, Va. "It used to be that a warrant officer was a technical expert, but warrant officers now are both technical experts and leaders. I remember—when I was an NCO—that warrant officers were sort of a bunch of grizzled guys who hung out together at the back of formations, stayed to themselves and really didn't involve themselves much with things outside their technical area. Don't get me wrong: They were good at their jobs, good soldiers and they helped win wars, but they restricted their authority to the narrow confines of their technical areas. They stayed within what they saw as their lane.

"Today, it's different. Warrant officers lead from the front. Today's warrant officer is much more leader-centric than in the past. We lead physical training; we lead in all areas, not just within our technical responsibilities. In the last 10 years, there has been a definite change."

WO1 Melissa S. Fields, the 3rd mate aboard LSV-1 Besson, *stands watch.*

Warrant officers serve in a variety of fields: administration, intelligence, systems operations, maintenance, bandmasters and other specialized fields. Most of the Army's warrant officers are skilled aviators, and there is a significant concentration of warrant officers within the Army's maritime field as engineers and deck officers. The deck officer field, with experience and promotion, leads to command as vessel masters, starting with smaller vessels such as landing craft and with selection and progressive training leading to command of the LSV-class vessels. At this level of command, the vessel master not only commands the ship but also serves as the detachment commander of the vessel's crew, with all the authority and responsibilities of a commander of any Army unit, including Uniform Code of Military Justice authority. Bandmasters are also commanders.

Aviation warrant officers exercise authority as aircraft commanders and operational mission commanders and fill a variety of aviation jobs that have high degrees of responsibility. The various levels of unit command, however, remain with traditional commissioned officers, captains through colonels. (Army warrant officers begin as warrant officer 1s, WO1, which is an appointed grade, but each selection and promotion to chief warrant officer 2 through chief warrant officer 5 is a commission. A commission, in the legal, technical sense, keeps with ancient and continuing international recognition as a nation's lawful and

CW4 James R. Crouse, the chief engineer aboard LSV-4 Bunker, *explains the vessel's power plant.*

documented appointment of an individual as a combatant commander.)

The Army's warrant officer corps has a unique history, reaching back to the latter half of the 19th century when the Army employed civilians acting as "warrant officers" specifically in the jobs of field clerks and pay clerks. They had limited authority to carry out their duties and remained civilians. Formal authority for those fields was legislated in 1916, and the Army Judge Advocate General eventually determined that they had "military status."

The major transitional point, however, was in the maritime field. During World War I, the Army created the Mine Planter Service within the Coast Artillery Corps (which had responsibility for coastal defense, including mine planting in littoral waterways). The Mine Planter Service was made up of licensed mariners who operated the boats. (Army maritime warrant officers today still must hold civilian-equivalent licenses to operate vessels, but the licenses are issued through Army training.) The Mine Planter Service was established and its duties defined by Congress. Thus, the month of that legislation, July 1918, is celebrated as the birthday of the warrant officer corps, and the corps is 94 years old now.

The history of warrant officers continued in an up-and-down fashion, with World War II, the Korean War and the Vietnam War contributing significantly to the corps' evolution until today's iteration with a full professional development education system and structure that includes the chief warrant officer 5 rank and branch affiliation.

The center for professional education is the U.S. Army Warrant Officer Career College at Fort Rucker, Ala., which offers the central components in warrant officers' careers—from preparing warrant officer candidates to educating the most senior warrant officers for high-responsibility staff positions—and is a component of the Combined Arms Center at Fort Leavenworth, Kan. Each Army branch, however, continues to provide several levels of technical proficiency training for warrant officers in the branch's specialties in addition to the college's general professional development courses.

Maritime warrant officer basic and advanced courses are conducted at JB Langley-Eustis, Va. CW4 Christopher K. Montroy is chief of the maritime operations division, which trains all of the Army's enlisted personnel, NCOs and warrant officers in the maritime field.

At JB Langley-Eustis a maritime warrant officer tracks in either the engineering or deck officer field. According to CW4 Montroy, each step of a maritime warrant officer training in the Army's eight-month-long basic deck officer course leads to a higher level of maritime license.

In addition, prospective maritime warrant officers can apply to the program as promotable E-4s. The general benchmark is to bring NCOs at the E-6 and E-7 ranks with about eight years of service into the warrant officer corps, which leaves them time in their careers to make long-term contributions and also the time to complete progressive levels of college education to make themselves competitive for promotions, according to CW4 Montroy. Most of the practical education of maritime warrant officers, however, is conducted on the job, where senior warrant officers continue a tradition that stems from the earliest days of the Mine Planter Service: mentoring while seeing that the best qualified people have the opportunity to progress.

CW4 Kali Pettigrew (whose photograph appears on this issue's cover) is the chief engineering officer aboard an LSV-1, and he takes maritime peer teaching seriously. "On the sea, incompetence will come to the top. The sea will devour you; it is unforgiving," he said.

"When someone looks at a warrant officer, the military and technical education should be a given, but what we have to stress is leadership," CW4 Pettigrew added. "Warrant officers have moved away from being single-sided, a technician; we now must be complete officers, and that means being a leader. Leaders inspire; managers manage."

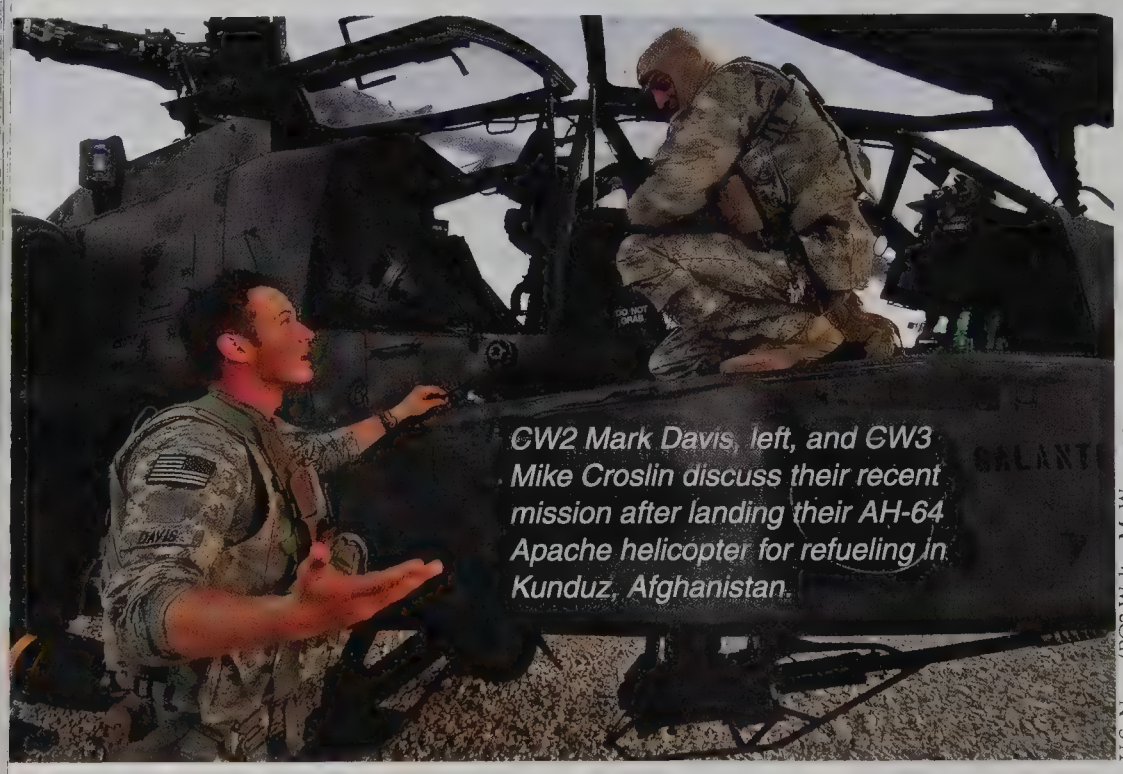
The Army's warrant officer corps has changed paradigms since 9/11. It is decidedly younger than in previous generations, and it is better educated—not just in the technical sense, but in the academic sense—and each member of that corps must increasingly display the capability for progression and capacity for greater responsibility. Members of today's warrant officer corps embrace their heritage, but they adapt for the future. Given the hard work that has taken the Army's warrant officer corps to get where it is, the quality of adaptability is part of that heritage, too. ★

Aviation Warrant Officers
On the Leading Edge

Most of the Army's warrant officers are aviators, skilled pilots who exercise authority as aircraft commanders and operational mission commanders, among the Army's most responsible and technically skilled warriors.

(Below) Chief Warrant Officer (CWO) Bill Rawling, top left, and his flight crew from 2nd Battalion, 147th Aviation Regiment, Minnesota National Guard, express their patriotism atop a UH-60 Black Hawk helicopter at the Baghdad International Airport, Iraq.

U.S. Army/SPC Jaren Lukach



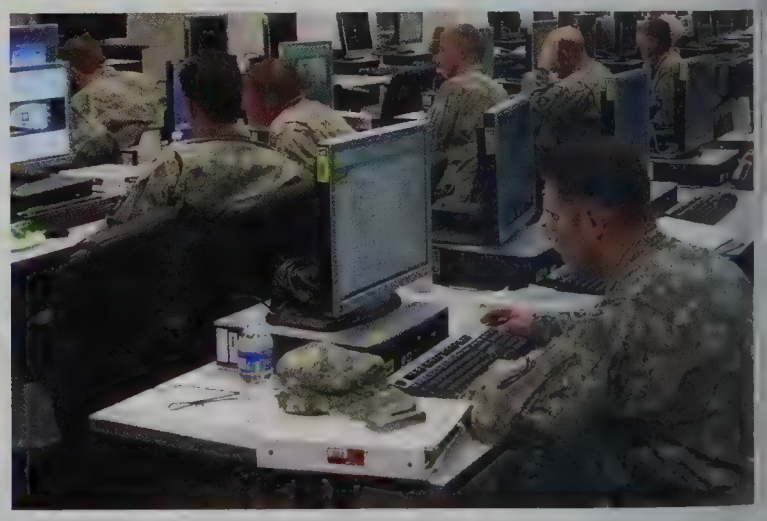
CW2 Mark Davis, left, and CW3 Mike Croslin discuss their recent mission after landing their AH-64 Apache helicopter for refueling in Kunduz, Afghanistan.

U.S. Navy/PO2 Walter M. Wayman

CWO Flor Armendariz, center, battalion aviation maintenance officer, and crew members take a break beside their UH-60 Black Hawk helicopter.

U.S. Army

COL Todd Royar, left, promotes Kyle Hill to CW5.



Army Aviation Warrant Officer Advanced Course students train at Fort Hood, Texas. The Army's mobile training team offers the course at home stations throughout the Army.

2012 ARMY Magazine Photo Contest

Sponsored by the Association of the U.S. Army

The Association of the U.S. Army is pleased to announce its annual ARMY Magazine photo contest. Amateur and professional photographers are invited to enter.

The winning photographs will be published in ARMY Magazine, and the photographers will be awarded cash prizes. First prize is $500; second prize is $300; third prize is $200. Those who are awarded an honorable mention will each receive $100.

Entry Rules:

1. Each photograph must have a U.S. Army-related subject and must have been taken on or after July 1, 2011.
2. Entries must not have been published elsewhere. Evidence of prior publication of any entry will disqualify it.
3. Each contestant is limited to three entries.
4. Entries may be 300 dpi digital photos, black-and-white prints or color prints. Photographs must not be tinted or altered. (Send digital photos to tspincic@ausa.org.)
5. The minimum size for prints is 5x7 inches; the maximum is 8x10 inches (no mats or frames).
6. A sheet of paper must be taped to the back of each entry with the following information: the photographer's name, address and telephone number, and caption information.
7. Entries must be mailed to: Editor in Chief, ARMY Magazine, 2425 Wilson Blvd., Arlington, VA 22201-3385, ATTN: Photo Contest.
8. Entries must be postmarked by July 31, 2012. Letters notifying the winners will be mailed in September.
9. Entries will not be returned.
10. Employees of AUSA and their family members are not eligible.
11. Prize-winning photographs may be published in ARMY Magazine and other AUSA publications three times.
12. Photographic quality and subject matter will be the primary considerations in judging.

For further information, contact Tom Spincic (tspincic@ausa.org), ARMY Magazine, 2425 Wilson Blvd., Arlington, VA 22201; (703) 907-2604.

For examples of past winners, see www.ausa.org/publications/armymagazine/aboutarmy/Pages/ARMYMagazineAnnualPhotoContest.aspx

Winfield Scott's

GEN.L SCOTT'S GRAND ENTRY INTO THE CITY OF M.

Published by James Baillie, 67th St. near 3rd Avenue New-York.

Remarkable Lieutenants

By COL Cole C. Kingseed
U.S. Army retired

"I give it as my fixed opinion, that but for our graduated cadets [from West Point], the war between the United States and Mexico might, and probably would have lasted some four or five years, with, in its first half, more defeats than victories falling to our share; whereas, in less than two campaigns, we conquered a great country and a peace without the loss of a single battle or skirmish."

—MG Winfield Scott

SEP.T 14.th 1847.

Serving under every American President from Thomas Jefferson to Abraham Lincoln, Winfield Scott commanded soldiers in the War of 1812, the Black Hawk War, the Second Seminole War, the war with Mexico and the American Civil War. In a career that spanned nearly five-and-a-half decades, Scott compiled an enviable record marked by battlefield success, adroit diplomacy, uncanny sagacity and unabashed egotism. His supreme moment lay in his campaign in central Mexico during the Mexican-American War, culminating in the capture of Mexico City on September 14, 1847.

MG Winfield Scott

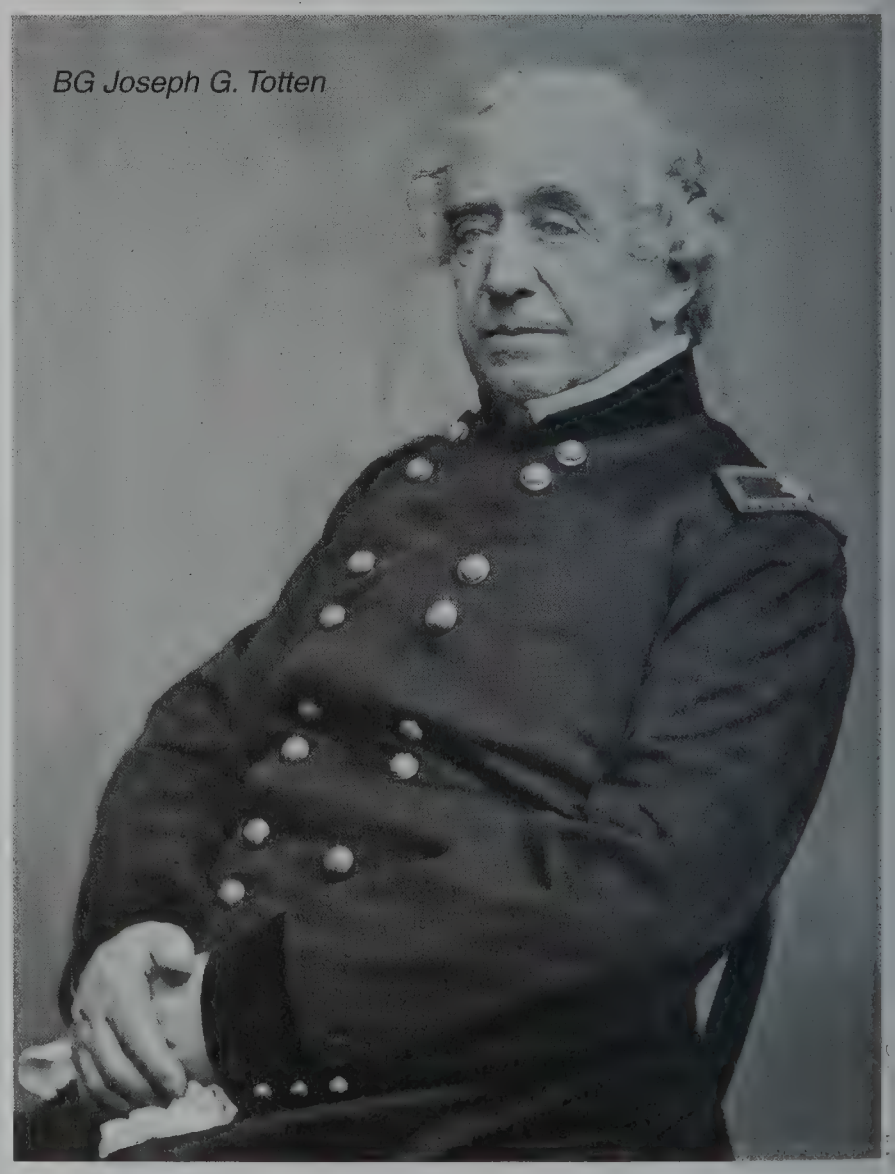
Library of Congress

How did Scott achieve such spectacular success in a campaign that to most observers seemed destined to fail? In addition to his considerable talents of generalship, Scott attributed much of his success to a small corps of junior West Point officers, primarily engineers, who joined his "little cabinet" of military advisors. Scott's cabinet consisted of COL Joseph G. Totten (the chief engineer for the expedition), LTC Ethan A. Hitchcock (acting inspector general), CPT Robert E. Lee and Scott's son-in-law, Henry Lee Scott (the commander's assistant adjutant general and chief of staff).

Totten headed the contingent from the Corps of Engineers that, in addition to CPT Lee, included CPT Joseph E. Johnston, lieutenants George G. Meade, Gustavus W. Smith, George B. McClellan and P.G.T. Beauregard. All of Totten's subordinates were officers of the highest promise, men who had stood at the very top of their respective classes at West Point. All were destined to gain martial immortality 15 years later during the American Civil War.

Though Scott had served as general-in-chief of the U.S. Army since July 5, 1841, then-President James K. Polk initially denied Scott active command of the first American army that eventually would engage in hostilities with Mexico. Command of the army that Polk ordered into the disputed territory between Texas and Mexico fell to Brevet BG Zachary Taylor. Even before Congress officially declared war on May 12, 1846, Taylor won two swift victories at Palo Alto and Resaca de la Palma, Texas. As soon as he received word of the declaration of war, Taylor crossed the Rio Grande and invaded Mexico.

While Taylor marched, Winfield Scott —who never enjoyed cordial relations with the Polk administration—fumed. Frustrated that he was forced to remain in Washington, D.C., while Taylor commanded in the field, Scott made an indiscreet comment to Secretary of War William Marcy in which he concluded that he did not "desire to place myself in the most perilous of all positions: a fire upon my rear from Washington, and a fire, in front, from the Mexicans." Polk, never a strong supporter of Scott, considered the Army's highest-ranking officer insubordinate and considered his immediate relief. Only Taylor's increasing fame—gained from two additional victories at Monterrey and Buena Vista, Mexico—led Polk, ever concerned that military success might propel Taylor



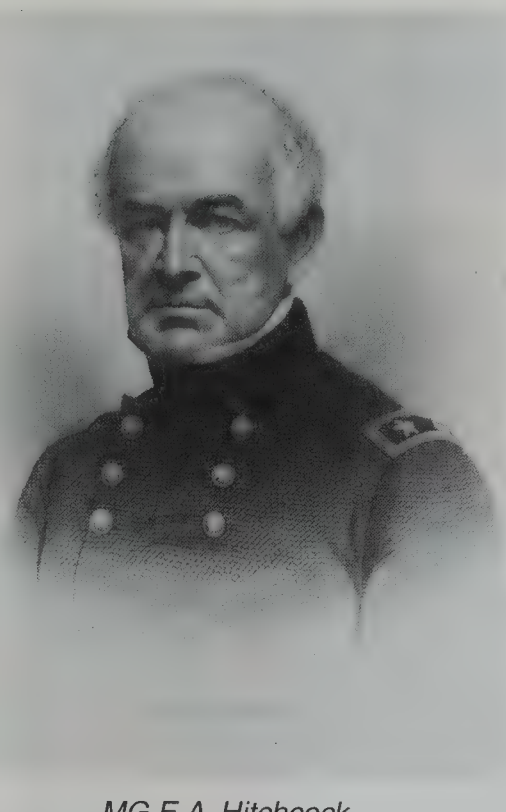
BG Joseph G. Totten

---

*COL Cole C. **Kingseed**, USA Ret., Ph.D., a former professor of history at the U.S. Military Academy, is a writer and consultant.*

to seek the Presidency on the opposition ticket, to agree that Scott should mount a campaign designed to capture Mexico City. It would be in this campaign that Scott's little cabinet would play a decisive role.

In November 1846, Polk formally addressed Scott and informed him that if he could trust Scott's "proper confidence in the administration," then Polk was "disposed" to assign him to the command. The ensuing campaign, the broad parameters of which the Polk Administration had already decided, called for an amphibious landing to capture the port of Veracruz, followed by an expeditious overland march along the National Highway toward Mexico City, a distance of approximately 250 miles, with the express goal of capturing the Mexican capital or forcing the Mexican government to negotiate a peace treaty. Speed was essential to avoid the scourge of yellow fever so common in the coastal region.



Library of Congress

MG E.A. Hitchcock

Gathering his expedition in southern Texas, Scott embarked on ships chartered by the War Department and joined Commodore David E. Conner, who was already blockading Veracruz with his Home Squadron, in late February 1847. Conner, the senior officer of the Navy in Mexican waters, had been in contact with Scott from the previous December and was all too willing to assist the Army. By early March, Scott's expeditionary force was off Veracruz, with the formidable fortress of San Juan de Ulua guarding the approaches to the city from the sea. Conner had previously reconnoitered a potential landing site and, if Scott concurred, he promised to land Scott's force directly from his naval vessels.

The following day, Scott, Conner, and their respective staffs and commanders climbed aboard the steamer *Petrita* and approached the fort of San Juan de Ulua. Venturing to within a mile-and-a-half of the fort, the party came under cannon fire. It was the first hostile fire that many, including Lee, had ever heard. One lucky shot could have sunk the small craft, killing not only Scott and Conner but also the critical members of their respective staffs, including Scott's little cabinet. Then-2LT George Meade, the future victor at Gettysburg, wrote home, "... one shot, hitting the vessel ... might have been the means of breaking up the whole expedition." Not only were Meade and Lee on board, but also Joseph Johnston and P.G.T. Beauregard. So, too, might the course of the American Civil War have been altered since Lee, Beauregard and Johnston would become three of the first five Confederate generals elevated to the rank of full general in 1861.

On March 9, Conner landed Scott's force of nearly 12,000 men in the largest amphibious operation in American history to date without a single fatality. In conference with his little cabinet, Scott decided to reduce the city's defense by siege rather than direct assault in order "to take the city with the least possible loss of life." To emplace his artillery, Scott turned to his engineers. Lee, Beauregard and Johnston provided excellent service, though their duties proved hazardous at times. On returning to their own lines on one occasion, Lee and Beauregard were fired upon by an overanxious sentry. Both escaped injury, although a bullet passed between Lee's arm and body, tearing his uniform.

Also active in the siege was 20-year-old 2LT George B. McClellan, United States Military Academy Class of 1846, who noted that he and the other members of the topographical engineers, including Meade and Johnston, were the only engineers who provided COL Totten, Lee's superior, with "information of value—that we had done more than all the rest." McClellan, whose ego matched Scott's, served under Lee's direction for the remainder of the siege.

Once the batteries were emplaced, the bombardment began in earnest on March 22. Five days later Veracruz capitulated. Scott himself accepted the formal surrender of Veracruz on March 29. The capture of such an important city with minimal casualties provided Scott a firm logistical base for subsequent operations. Eight years later, Scott received a brevet promotion to the rank of lieutenant general, a rank previously held only by George Washington. Congress dated Scott's promotion retroactive to the surrender of Veracruz.

Far more important than being mentioned in dispatches was the trust that Scott's little cabinet gained as a result of the Veracruz expedition. Before Totten returned to Washington, he mentioned the services of his elite cadre of engineers. Totten cited both Lee and Johnston for having rendered "occasional aid" in staff work. Totten's high estimation of Lee merely confirmed Scott's high opinion of him. With Totten's departure, Lee became the second-ranking engineer in Scott's army and was in daily contact with the commanding general.

With his base of operations secure, Scott moved into the interior along the National Highway, the same route that Hernán Cortés had taken in 1519. The highway traversed 250 miles of road, interspersed with numerous mountain defiles, by way of Jalapa, Perote and Puebla. The route would not be unopposed since Mexican president (and general) Antonio López de Santa Anna had recently returned from the northern battlefields where he had been repeatedly defeated by BG Zachary Taylor. Consolidating his political power in the capital, Santa Anna moved his approximately 16,000-man army east and set up a strong

LT Robert E. Lee

Washington and Lee University

defensive position at Cerro Gordo, a pass where the highway was flanked by large hills, the largest known as El Telégrafo. El Telégrafo, 550 feet higher than the surrounding countryside, dominated Cerro Gordo, and the ground to its north was considered impassable.

In April 1847, Scott's lead elements encountered Santa Anna's formidable defenses. Beauregard conducted the initial reconnaissance and suggested that the army await Scott's arrival, which occurred on April 14. Unwilling to entrust the execution of an attack plan on the recommendation of Beauregard, Scott turned to Lee to direct the scouting. CPT Lee advanced farther than had Beauregard, and he discovered a path that led directly to the Mexican rear. At one point, Lee took refuge under a log, where Mexican soldiers came to rest. It was nightfall before Lee returned to Scott's headquarters with the news that the Americans could envelop the Mexican position.

The next day, Lee joined the lead contingent of Scott's army and guided them along the path that he had recently discovered. The Battle of Cerro Gordo lasted but a few hours; in the end, the Mexican army, with Santa Anna in the lead, fled westward. At a cost of 63 killed and 368 wounded from approximately 8,500 soldiers engaged, Scott had routed the principal Mexican army. Not surprisingly, Scott attributed much of his success to Lee, who received a brevet promotion to the rank of major to date from April 18, 1847. Though he applauded all his engineers, Scott proclaimed, "I am impelled to make special mention of the services of Captain Robert E. Lee. … This officer, greatly distinguished at the siege of Veracruz, was again indefatigable during these operations, in reconnaissance … nor was he less conspicuous in planting batteries, and in conducting columns to their stations under the heavy fire of the enemy."

Following a brief pause to account for the departure of many of his volunteers whose term of enlistment had expired, Scott next moved his force, now barely 7,000 soldiers, toward the valley of central Mexico. Confident of success, he made a bold move and abandoned his logistical bases in Puebla and Veracruz on June 4, effectively cutting his army off from the coast. Like Cortés before him, Scott would live off the land. On hearing of Scott's decision, the Duke of Wellington, the aged victor of Waterloo, concluded, "Scott is lost! He has been carried away by successes! He can't take the city, and he can't fall back on his base."

It would be July before Scott marched his army from Jalapa toward the Mexican capital. By now, he was scarcely 90 miles from Mexico City.

Mexico City sits in the center of a large basin of about 1,500 square miles. Three large lakes surround the city and restrict the approaches to four possible routes. Immediately south of the capital lay a large lava field; as was the case of El Telégrafo at Cerro Gordo, the lava flats were deemed impassable. Entry was further limited to a number of causeways of various distances that led directly to the city's gates. The castle fortress of Chapultepec guarded the westernmost route into the city. To Lee and his engineers fell the task of devising the best approach to reach the Mexican capital.

Lee's reconnaissance revealed that the enemy had heavily fortified El Peñon, a 450-foot hill covered with artillery and commanded by Santa Anna himself. El Peñon stood astride the principal highway from Scott's position into the city. To avoid excessive casualties, Scott acted on Lee's recommendation and decided to turn the enemy by conducting a turning movement far south of the main enemy line of defense. Scott directed his army to the south and occupied the town of San Augustín. The Mexican army lay three miles to the north at San Antonio and Churubusco. The enemy force was protected by the lava field on its west, so any attack would have to be frontal into the teeth of the enemy's defenses.

Scott reorganized his army into four divisions for the final advance against Mexico City. On August 15, 1847, Scott ordered his army to advance.

Meeting little opposition, Scott reached a high ridge that lay at the base of Popocatépetl, from which he could gaze into the Valley of Mexico. Before him stood Mexico City,

A Currier & Ives print depicts the landing of Scott's force of nearly 12,000 men at Veracruz, Mexico, on March 9, 1847, the largest amphibious operation in American history to date without a single fatality.

built on the ruins of the Aztec capital Tenochtitlan. Never one to play down the drama, according to historian John S.D. Eisenhower, Scott described the sight as "the object of all our dreams and hopes—toils and dangers—once the gorgeous seat of the Montezumas ... That splendid city soon shall be ours!"

Scott was determined to find an alternative approach as well as to confirm that the direct road toward Mexico City by San Antonio was as difficult as initially reported. Scott assigned this second chore to CPT James L. Mason. Lee's reconnaissance confirmed his initial observation that given the element of surprise, infantry could advance across the lava fields before the Mexican defenders could react. That evening amongst Scott's division commanders, Lee argued vehemently for that approach.

An observer of the meeting at Scott's headquarters, LT Raphael Semmes, who would one day command the CSS *Alabama*, succinctly summarized the value of the most prominent member of Scott's staff: "The services of Captain Lee were invaluable to his chief. Endowed with a mind which has no superior in his corps, and possessing great energy of character, he examined, counseled and advised with a judgment, tact and discretion worthy of all praise."

"His talent for topography," Semmes continued, "was peculiar, and he seemed to receive impressions intuitively which it cost other men much labor to acquire. [CPT James L.] Mason, though a very young man, was scarcely, if at all, his inferior in this respect."

Based on Lee's reconnaissance, Scott opted for Lee's course of action and instructed him to start early the next morning with the engineer company and lay the track to move artillery. On August 19, Lee and his party moved out in accordance with Scott's orders. Lee remained in general charge of the reconnaissance; Beauregard served as his principal assistant. Second lieutenant George McClellan of the engineer company was also present, as was CPT Joseph Hooker, a future commander of the Army of the Potomac. Lee's principal biographer, Douglas Southall Freeman, speculates that perhaps here Lee saw for the first time a quiet "Mr. Jackson" who was to become the future "Stonewall" of Lee's army of Northern Virginia 15 years later.

As the infantry followed his reconnaissance party, Lee personally accompanied the troops to a favorable position to begin the assault. Next, he personally selected a position for the batteries on the most advantageous ground to support the impending attack. That same night the senior American commander on the ground, BG Persifor F. Smith, of MG David Twiggs' division, decided to attack at first light. Lee volunteered to recross the lava field and inform Scott in order for Scott to make a demonstration on the Mexican front.

With nothing to guide him but the lightning that brightened the night sky, Lee stumbled into Scott's headquarters three miles away around 11 P.M. Scott immediately ordered division commander Twiggs to make an early morning demonstration to ensure Smith's success. Without hesitation, Lee volunteered to guide Twiggs' division into position. It was the third time Lee had negotiated the lava field, and he was at the point of human exhaustion.

The ensuing American attacks at Contreras and Churubusco proved extraordinarily successful. Twiggs cited Lee in his report: "To Captain Lee, of the engineers, I have again the pleasure of tendering my thanks for the exceedingly valuable services rendered throughout the whole of these operations." Generals P.F. Smith, Gideon Pillow and James Shields wholeheartedly concurred. In short, every general officer associated with the fighting at Churubusco mentioned Lee in dispatches. Scott added a final tribute when he named the officers of his staff, including his little cabinet, who deserved commendation, among them CPT R.E. Lee "as distinguished for felicitous execution as for science and daring."

For his actions at Churubusco, Lee received a brevet promotion to lieutenant colonel as of August 20. The following year MG Scott stated emphatically that Lee's journeys on the nights of August 19 and 20 constituted "the greatest feat of physical and moral courage performed by any individual, in my knowledge, pending the campaign."

To Scott's surprise, the Mexican government requested an armistice the day after the battle of Churubusco. When it was evident that Santa Anna was taking advantage of the armistice to improve the defenses of the city, Scott called his officers together to consider the best way of attacking the city, including capturing the citadel of Chapultepec, its main defense. Scott charged Lee with the burden of directing the reconnaissance. Serving again as Lee's second in command was Beauregard. Scott ordered an attack on the 200-foot-high citadel to commence as soon as practical. In favoring a direct assault on Chapultepec, Scott sided with Beauregard and not Lee, who favored an attack from the south.

After first dispensing a Mexican force at Molina del Rey on September 8, Scott commenced his assault on Mexico's main defenses five days later. With their reconnaissance work complete and Scott's artillery batteries in place, Lee and his engineers observed the fighting from a distance. By 9:30 in the morning of September 13, the Stars and Stripes flew over Chapultepec. When he viewed the American flag, Santa Anna reportedly exclaimed, "I believe if we were to plan our batteries in hell, the damned Yankees would take them from us."

Library of Congress

MG Gustavus Woodson Smith

The fall of Chapultepec signaled that the causeways that led to Mexico City's gates now lay open. Scott pushed his forces and, in hard firing, entered the city on September 13. The next day, MG Winfield Scott, arrayed in his finest uniform, formally rode through the Grand Plaza and took possession of Mexico City. Scott again praised Lee for his conduct at Chapultepec, and the Department of War gave Lee his third brevet, this time to the rank of colonel. Other than mopping up operations within the city itself, the fighting in Mexico was at an end.

When news of the capture of Mexico City reached Europe, the Duke of Wellington revised his earlier assessment of MG Scott and proclaimed that Scott's "campaign was unsurpassed in military annals. He is the greatest living soldier." The Iron Duke's praise was far more than Scott received from his own government. Fearing Scott's growing popularity with the opposing Whig Party, President Polk relieved him of his command in Mexico on February 18, 1848, and ordered him to attend a court of inquiry to investigate allegations against the general-in-chief by some of his subordinate commanders. It was a sad ending to a brilliant campaign.

By any standards of achievement, Scott's central Mexico campaign had been remarkable. With an army of less than 11,000 soldiers, he had defeated one exceeding 30,000 troops defending their own capital. While sustaining fewer than 3,200 casualties, Scott had inflicted four or five times that many on his adversary. Lieutenant Ulysses S. Grant, a junior officer in one of Scott's divisions, believed that in the battles surrounding Mexico City, Scott's "strategy and tactics … were faultless."

For his part, Scott assigned credit for the campaign where he felt it was due. Historian Eisenhower recounts a dinner that Scott hosted on December 8, 1847, in honor of BG Twiggs, who was departing to take command at Veracruz. In attendance were Scott's senior generals and many of his brigade and regimental commanders. Also attending were three former West Point cadets—the West Point graduates actually being toasted were not, in general, high-ranking enough to be present. In delivering a toast to the United States Military Academy, Scott declared that but for the "science of the Military Academy … this army, multiplied by four, could not have entered the capital of Mexico."

In mentoring his talented subordinates, Scott had demonstrated that he was a commander of uncanny ability in recognizing talent and potential in junior officers. Of the officers who composed Scott's little cabinet and who had served on his staff, Robert E. Lee stood first and foremost in the commander's estimation. Brevetted three times for valor, Lee emerged from the conflict with lessons that he applied with great success during the American Civil War. Before departing Mexico, Lee and his fellow officers had also formed the "Aztec Club," in which Lee renewed acquaintances with many of the officers who had served under Scott. There Lee maintained close contact with Joseph Johnston, P.G.T. Beauregard, Gustavus Smith, George McClellan, George Meade … and there he also met Ulysses S. Grant.

According to biographer Freeman, Scott's future chief of staff E.D. Keyes stated that as a result of their labors together Scott developed an "almost idolatrous fancy for Lee, whose military genius he estimated far above that of any other officer of the army." In 1858, still general-in-chief of the U.S. Army, Scott referred to Lee in an official letter as "the very best soldier I ever saw in the field"—high praise indeed from a general who arguably was this nation's most talented military commander of the 19th century. Fifteen years later, then-GEN Lee and MG Scott's other talented young officers formed the nucleus of the command elite of the Union and Confederate armies that waged the Civil War. ★

CompanyCommand

Building Combat-Ready Teams

To: Future Platoon Leaders
From: Current and Past Platoon Leaders

Advice for New Lieutenants

Life accelerates quickly for second lieutenants. Their college days are over; their professional careers have begun. Within their first year they attend their branch-specific schooling, often complete additional specialty training and then arrive at their first operational units. Having spent years preparing to lead American Soldiers, they begin to lead for real, with real consequences.

Professionals seek to raise the bar of their practice. In the Platoon Leader (PL) Professional Forum, experienced officers share their experiences and lessons learned to enable the next generation of lieutenants to build upon that hard-earned knowledge. This month, we feature excerpts from advice applicable to 2LTs as they transition from being cadets to leading Soldiers.

Making the most of your Basic Officer Leadership Course [BOLC]

More than 400 lieutenants commissioned in 2010 participated in a PL Forum survey to share their insights on their first years of service with this year's newly commissioned officers. Here are excerpts from their advice.

Pay attention to the classes on supply and maintenance. They weren't emphasized much in school, but they are just as important as tactics (which makes up the core of the course) when you get to your unit. Make sure to spend time studying each night, even if only for 30 minutes to an hour, even when it isn't required for the next day. If you can get a little ahead of the game, it will help a lot when tactics begins and you get really busy with long, long nights.—**1LT, Armor**

Get as many certifications done as possible—Sec+, N+, A+. You will need them, and BOLC is really the only time you will ever have time to get them without pulling away from your other duties. I was placed into a battalion S6 position, an O-3 slot, immediately after arriving to JBLM [Joint Base Lewis-McChord], and I have been in this position for over nine months. With the Army continuing its transition to brigade combat teams, it is becoming more and more likely that 2LTs will be filling battalion S6 positions instead of PL slots for Signal units. You will be expected to be the subject matter expert on all things related to communications even if it is not your equipment, so get a copy of your receiving unit's MTOE [Modified Table of Organization and Equipment] and start looking up TMs [technical manuals] and quick reference guides for all of your communications equipment.—**1LT, Signal Corps**

The biggest takeaways are the relationships you develop with other LTs along the way. You will literally know people all over the world after you finish, and you never know when you

Soldiers receive training in the Basic Officer Leadership Course (BOLC). "Your progress in this course," according to one lieutenant, "will directly relate to your success as a platoon leader."

While attending BOLC, soldiers are trained in skills such as supply, maintenance and tactics, the latter making up the core of the program.

might see them again. (Two of my BOLC classmates replaced me in Afghanistan). You'll learn the technical stuff once you get to your unit. Keep all class materials and network, network, network. Keep your instructors' emails and hound them for stories about things they went through. For the most part, their advice is legit. **—1LT, Quartermaster**

BOLC is no sweat, but flight school is no joke. They have completely gotten rid of the hold periods between phases. Your timeline will be something like this: BOLC, one-to-two weeks off; SERE [Survival, Evasion, Resistance and Escape], one-to-two weeks off; IERW (basic flight school), one-to-three weeks off; Advanced Airframe, two-to-three weeks off; and then PCS to your duty station. My advice is to study for each phase as it comes. There is a lot to know for each phase so it's really not worth trying to study ahead. Just be prepared to study hard throughout your time at Fort Rucker, and then to continue studying once you leave. **—1LT, Aviation**

Take your classroom scenarios seriously. Treat them as real life. Pay attention to details in the products you create, and maintain a broad understanding of the whole picture, not just your contribution to the group.**—1LT, Military Intelligence**

Work hard, both physically and mentally. I don't know how many times I was told that all that matters is to show up at your first unit in shape and competent. It was absolutely true. Do not worry about gaming deployments or units; focus instead on doing your best in both gunnery and fire support, while getting in shape. When you get to your unit—no matter how bad you may want to be an FSO, FDO, or PL—the fact of the matter is they are going to put you where they need you. That position must become the job you wanted; dedicate yourself to it. That is why it is so important to understand both the gunnery and the fire support sides of our branch.**—1LT, Field Artillery**

IBOLC will prepare you tactically but not for everything a platoon leader does. Learn on your own during your free time. Focus on things like property and accountability, range operations, convoy movements and reporting. These are the types of things that will set you up for success as a platoon leader.**—1LT, Infantry**

Don't skate through BOLC. Go into the course knowing that once you leave you're going to be leading Soldiers (some straight into combat). Your progress in this course will directly relate to your success as a platoon leader and to your Soldiers' perceptions of you and your leadership. In addition, keep your nose clean while you're training. Soldiers see you in public places and know you are a 2LT (just like you know they're Soldiers), and perception is everything. Your classmates are going to the four winds after BOLC is over; don't sacrifice your career for a few good nights.**—1LT, Military Police**

You're going to get out of BOLC what you put into it. You will not be challenged academically to study and learn the trade, so I strongly suggest getting into the FMs [field manuals] and TMs [training manuals] to learn as much as you can about the many aspects involved in being an engineer. Don't expect to get a follow-on school when you leave Fort Leonard Wood [Mo.]. I was the only person in my class to get a slot to Ranger or Sapper school, and it was only because I contacted my unit in Hawaii to have them cut me orders and pay for it. **—1LT, Engineer**

Be prepared to work. You're not in college anymore. The things you learn in BOLC will be needed as soon as you get to your unit.

—1LT, Field Artillery

"Driving On" in Ranger School

After completing Ranger School in January 2012, 2LT Nate Webster wrote a 13,000-word reflection to share his experiences and advice with the next generation of Ranger students. Here are excerpts from his "Ranger Notes."

There are many Ranger School primers and experiences out there. I will try to share mine as honestly and completely as possible, as well as provide some tips and tricks I found useful. ... My writing ability is pretty abysmal at this time, so don't judge my grammatical errors or syn-

tax/diction mistakes. While I could write you a pretty solid OPORD [operations order] right now, this stream-of-consciousness work might not be so hot.

... My friend Wes Cochrane told me before I went to Ranger School to remember that eventually you will be warm, eventually you will eat and eventually you will take your ruck off. I kept that thought in the back of my mind every day. Just remember that whatever hardship you are going through, it will eventually end.

You will, of course, be suffering constantly. This sounds a little pessimistic, but it is true. Ranger School draws out the reality of Maslow's hierarchy, sometimes in an ugly way. I saw officers lose their dignity over food in Darby phase. You will constantly think about how to be less cold, less hungry (not full ... you are never full) and less tired. You will be shivering in formations wondering why you aren't allowed to wear your snivel gear. You will be so cold you'll share a bivvy sack with your Ranger buddy. You will conduct far too thorough an analysis of what extra stuff to pack in your ruck because each ounce of weight is a little more suffering on your back. There will be times in Mountain Phase when you look up the hill and convince yourself that there is no way you're going to get up it. You will *dread* taking a knee at security halts because your joints feel close to exploding. You will probably see many of your Ranger buddies simply screw over the leadership and remain standing, even though you and they know the right thing to do is take a knee, but you and they will be in too much pain. You will blow off showering when you're in garrison because those four minutes could be better spent sleeping—even though hygiene is important. You will get royally frustrated with the dude in your squad who always gets the "good" MREs, and then you'll probably scheme and plot your own way to get the better MRE next time. You will shake uncontrollably in the morning, stay in your bivvy sack a few more minutes than you should and not hustle to get your stuff ready for the morning, even though your buddy is in leadership and needs you to work faster.

You will do all these things because I—and every other Ranger student in the history of the world—did. And it's okay. No one is a perfect Ranger student. You can only hope to be better than you were the day before. I had the most childish tantrum in Darby when I couldn't untangle the claymore mine from its ridiculous rat's nest of tie-downs. I pulled out my knife and cut every single one of them (not the right answer) and felt momentarily better. I then had to spend five minutes our squad didn't have retying those knots. I'm not proud of the many moments of indiscipline I had during Ranger School—but that's the point. It's a humbling experience, and I learned greatly from it.

The key is to try and not do that one wrong thing the next day and to help out your buddy every time. It takes discipline in the purest sense. I had a very elementary notion of discipline before Ranger School. True discipline is doing the task required of you at the individual level in order to benefit the group without being told to do so. There will be many moments when you can easily get away with not doing the right thing. Ranger Instructors [RIs] will not gig you for being a turd as a rifleman; they *will* gig your squad leader. And when you are suffering immensely with a ruck on your back, you won't care about your squad leader even though he's your friend. You can hope, though, that you will have the discipline to do the right thing, because tomorrow you might be the squad leader who needs his guys to do the right thing in turn. That sort of give and take shouldn't be your primary motivator to do the right thing, but for some guys in your squad it will be.

The Florida RIs used to say to us a lot, "Don't just survive!" I actually loved hearing that because it was a sharp reminder for me. I wish I'd have heard it more in Mountains because I personally was way too focused on how miserable I was during that phase. Ranger School is a personal survival school, but you have to—and you will—overcome that. You will suffer immensely, but at the end of the day, you will hopefully be able to share a few minutes with your Ranger buddy, eat your MRE and know that you are one day closer to the finish.

Be the guy with a well-timed joke, positive attitude and stick of gum to share and you will make it through. You will be told over and over again not to quit—but really that's unnecessary and stupid. You won't quit because the guys to your left and right aren't quitting. You will be with people who are working harder than you even thought possible. That's what makes Ranger School special.

Second Lieutenant Nate Webster, left, completed Ranger School in January of this year. In his reflections on his experience, he wrote, "You will suffer immensely, but at the end of the day, you will ... know that you are one day closer to the finish."

> I had a very elementary notion of discipline before Ranger School. True discipline is doing the task required of you at the individual level in order to benefit the group without being told to do so.
>
> **—2LT Nate Webster**

Taking Charge as a Platoon Leader

The most viewed file in the 11-year history of the Platoon Leader forum is "Congrats … you're a platoon leader. Now what?" by 1LT (now MAJ) Nate Palisca. Here are excerpts from his advice.

This is it. After countless hours spent earning your commission, you finally have it. A platoon. *Your* platoon. Sure, the goal at West Point, OCS and ROTC was always to get your gold bar, but now you can truthfully call yourself a platoon leader. So what happens now? Here are 10 things to focus on in your first 90 days as a platoon leader.

You and Your PSG. Without question, your platoon sergeant should be the first person in the platoon you talk to. Sit down with him or her and ask for a rundown on the platoon. Some ideas for questions: How trained are the Soldiers on critical tasks? How do we stand on PT? How is morale in the platoon? What tracking systems do you have in place and can I get a copy? How is maintenance? What are our SOPs? What training is planned? How do you visualize our relationship as PL/PSG? Are there any major personnel issues/legal cases? Who are the problem children? Who are the studs? It is important that you form your own opinions about your people, but the extremes (good and bad) are easy and your PSG should know.

You and Your Platoon. You can meet with your NCOs before talking to the Soldiers if you want to, but it's not necessary. Definitely schedule a time to talk to your platoon as a whole soon after taking charge. They will be curious about you, and they need to see your face as soon as possible. You're not just another new guy; you're the new lieutenant. Let them know who you are and where you're coming from. You don't have to give them a hardcore Patton-style speech; just be yourself. Your Soldiers will be able to see through any smoke and mirrors.

Do not, under any circumstances, criticize the last platoon leader. That shows insecurity, weakness and unprofessionalism on your part; and it's simply in bad taste. Let your Soldiers know that you've heard good things about the platoon and that you are excited to be there—it helps if you actually mean it.

Counseling. Counseling a sergeant first class who has 12 or more years of time in service can be an intimidating proposition, especially when you have all of about six months under your belt. How are you supposed to tell him or her anything? It all comes down to how you approach it. Given that each person is unique, there is no set method that guarantees success. Take a week or two to get to know your platoon sergeant before initiating counseling and then proceed with a well-thought-out plan.

The bottom line on counseling is that you owe it to your PSG to let him know what your expectations are and to give him some direction. Don't let this one slide. It could come back to haunt you when it's time to write your PSG's NCOER [noncommissioned officer evaluation report].

Playing Well with Others. Cultivate good working relationships with the key players in your world. In general, people are much more willing to help you if they see you as a friendly face. Examples include: your commander, XO, first sergeant, other platoon leaders, supply sergeant, maintenance team chief, headquarters platoon sergeant and any one else you will be working with on a regular basis.

Being with Your Soldiers. Be visible to your Soldiers without being nosy or overbearing. This is easier said than done, but it is worth your effort to get it right. Yes, you will make a first impression when you initially talk to your platoon, but it will take a while for Soldiers to "feel you out" and see what kind of PL you are.

While still a first lieutenant, CPT Nate Palisca (now a major) wrote a document on the Platoon Leader forum that gives advice to new platoon leaders on skills such as communicating with their platoon sergeants and soldiers.

According to one first lieutenant, "The biggest takeaways are the relationships you develop with other lieutenants along the way. You will literally know people all over the world after you finish."

Standing Operating Procedures. If your platoon has a written SOP, read, learn and internalize it. If not, get with your NCOs and start drafting one. Everyone in your platoon needs to be on the same sheet of music if you are going to be successful.

OER Support Forms. If your commander doesn't give you a copy of his OER [officer evaluation report] Support Form (DA Form 67-9-1), ask for it. You should have a copy of your rater's and senior rater's support forms. Both of those forms will not only give you ideas on how to write yours, but they will also show you how your bosses think yours should be formatted.

After you have your bosses' support forms, start drafting your junior officer developmental support form [JODSF] and your support form. You might think that your commander will remember all of the great and wonderful things you did—and he will, after you remind him. A good support form is a tool that helps you get a fair shake on your OER.

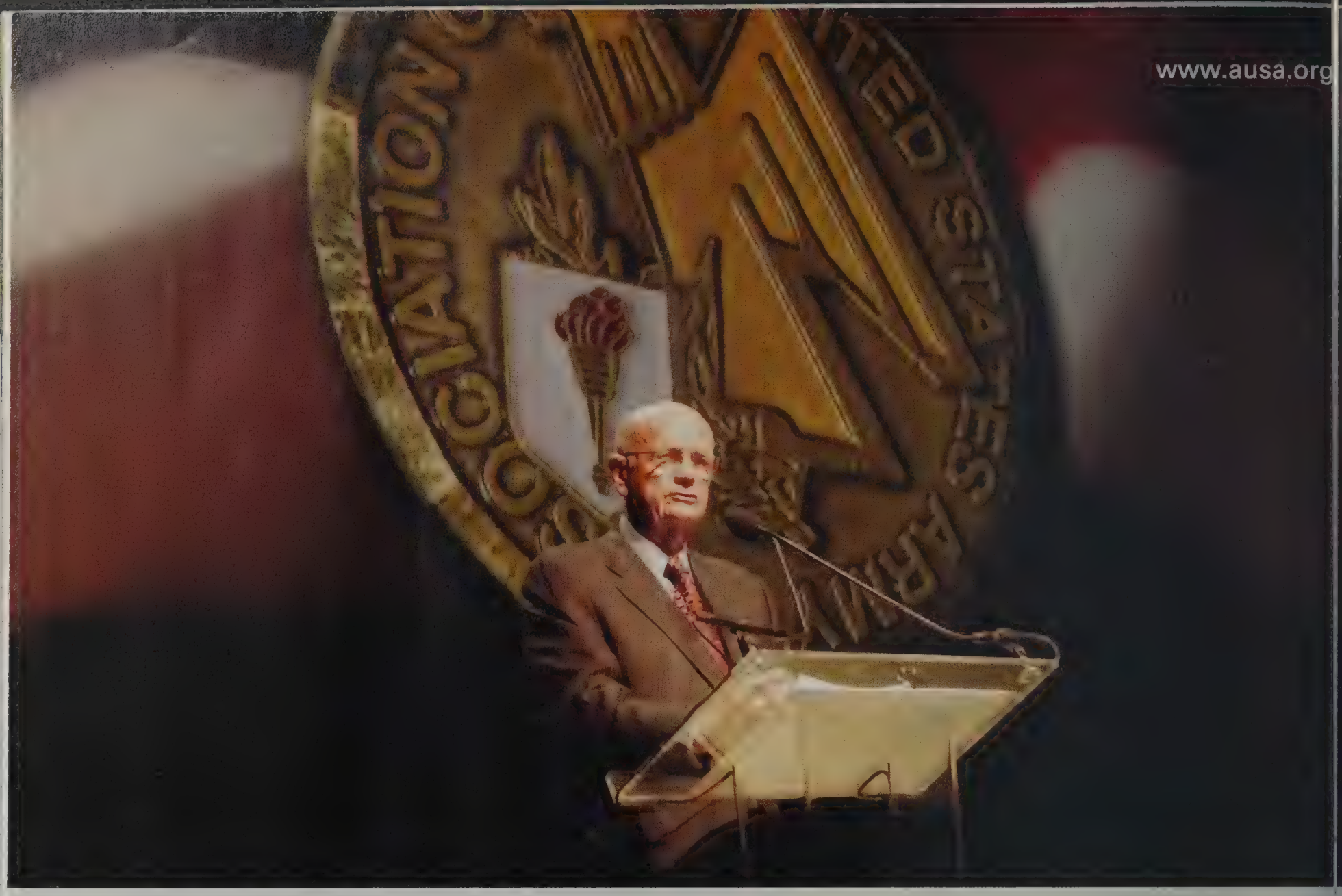
Layouts and Property Accountability. You should (and likely will) do a layout of all of the equipment assigned to your platoon. You will inventory and sign for all of it, thus taking responsibility for your platoon's equipment. You can't afford to screw this up. Here's some good advice: While you are counting widgets and gizmos, ensure you are looking for serviceability in addition to just how many are there. If you have a piece of equipment that is unserviceable, it's not doing you any good, so you may as well be missing it.

After your layout, you will need to ensure your hand receipt is correct (so you don't sign for things that aren't there) and begin the process of filling your shortages. This is where your XO and supply sergeant can be very helpful. Both of them can guide you through the process of ordering replacement equipment.

Systems Improvement. Look around at how your platoon conducts business. Start thinking about what I call systems improvement. Look for things that could make your Soldiers' lives easier. Sometimes that may be a tool or piece of equipment that they never had; sometimes it's streamlining a system. Whatever it may be, your guys will appreciate you looking out for their welfare. One important caveat to that is: Don't make changes just for the sake of change, or to be able to say, "Look what I did." That won't help anybody. It will only serve to make you look ego-driven and alienate you from your platoon. Just observe, ask your Soldiers/NCOs and give it some thought.

You and Your Ego. You don't have to tell your NCOs that you are in charge. They know how you fit into the platoon. That being said, listen to your NCOs and pick their brains for the knowledge that only their years of experience can bring. The bottom line is that you are in charge, but your opinion isn't the only one that matters.

As professionals, we have a collective responsibility to our country to be the best at what we do. When we learn from—and with—each other, we become more professional. If you are a currently commissioned officer, we invite you to join the conversation in the CompanyCommand Forum.



Over 650 of the world's leading defense companies are members of the AUSA Sustaining Membership Program. Is yours?

The Association of the United States Army's (AUSA) Sustaining Membership Program is your vital link to Army decision-makers at the highest levels. As the Army's professional organization, AUSA has played a role in strengthening national security for over 60 years by facilitating partnerships between military decision-makers and industry leaders.

When you join AUSA's Sustaining Membership Program, your company's executives will have the opportunity to share ideas with top Army officials at AUSA events. These events are conducted and attended by high level Army decision-makers, DoD officials and industry leaders – the individuals who are setting the agenda for the Army's future!

Join us today and discover what the AUSA Sustaining Membership Program can do for your business.

AUSA Sustaining Membership Program:
Supporting the Army–Industry Partnership

Association of the United States Army
2425 Wilson Boulevard • Arlington, VA 22201 • (703) 841-4300 ext. 2665 • www.ausa.org

Soldier Armed

WIN-T Increment 2: Cornerstone of Army Network Modernization

By Scott R. Gourley

One critical aspect of the Army's recent Network Integration Evaluation (NIE) 12.2, held at White Sands Missile Range, N.M., from May through June, was the Initial Operational Test and Evaluation (IOT&E) event for the Warfighter Information Network-Tactical (WIN-T) Increment 2. Performance of that system in soldiers' hands during the IOT&E will support upcoming acquisition milestone decisions that will significantly expand tactical communications capabilities for U.S. Army warfighters.

According to COL Edward J. Swanson, project manager for WIN-T in the Program Executive Office Command, Control, Communications-Tactical (PEO C3T), the new Increment 2 (Inc2) system is the cornerstone of the Army's network modernization strategy, and its IOT&E testing during the NIE is central to the NIE/agile acquisition processes, which are designed to ensure that commanders are fielded with fully integrated systems.

"What Inc2 is going to provide is tactical wide-area network mobility, which is a critical gap," he said, "and the emphasis there is on mobility."

Swanson said that the wide-area network mobility gap was clearly recognized when the Army's 3rd Infantry Division made their march on Baghdad during Operation Iraqi Freedom (OIF).

"Back in 2003 the gap was identified when the maneuver units were outrunning their communications during OIF on their way to Baghdad," he explained. "What was called the joint network node (JNN) was fielded to address that gap, giving a beyond-line-of-sight capability organic to the maneuver battalions and brigades and allowing them to operate more autonomously. They still had to stop, however, and, at the quick halt, set up communications." JNN became WIN-T Increment 1.

According to Jim Price, vice president of tactical networks for General Dynamics C4 Systems (GDC4S), the company has been fielding the initial WIN-T increment since mid-2004, with the systems being deployed in combat operations since early 2005.

Along the way, the system design was enhanced to an Increment 1A configuration. Noting that the satellite communications on the original JNN/WIN-T Increment 1 design were limited to the commercial satellite Ku-band, Swanson recalled, "What we did was upgrade the systems to what we call 1 Alpha. What that did was add a Ka-band to the beyond-line-of-sight satellite terminals, allowing not only

The Warfighter Information Network-Tactical (WIN-T) Increment 2 delivers the WIN-T backbone on mobile platforms like the Mine Resistant Ambush Protected All-Terrain Vehicle (M-ATV)-based Point of Presence Vehicle shown here at Fort Bliss, Texas.

Scott Gourley

The WIN-T Increment 2 Tactical Communications Node and Satellite Transmission Terminal set up in the field during the Communications Exercise buildup preceding the Network Integration Exercise 12.2 at White Sands Missile Range, N.M.

commercial satellite communications but also access to military satellites.

"Increment 1A is completing fielding now with fielding to the Army to be finished in August," Swanson said, "and right on the tail of that is an upgrade that we call Increment 1B. The purpose of 1B is to increase interoperability between Increment 1 and Increment 2, and what we did was pull a couple of key capabilities from Increment 2 forward. We will be inserting them in Increment 1B."

Current schedules for WIN-T Increment 1B upgrade fielding run through fiscal year (FY) 2016. Swanson was quick to note that while the Increment 1A/1B systems address part of the identified wide-area network gap, they do not address the important element of mobility. It is the wide-area network mobility gap that will be closed by WIN-T Increment 2.

"We have been focused on what is really a different kind of fight in Afghanistan and Iraq over the last decade," Swanson explained. "It has really been more of a wide-area security mission, in which we are very decentralized, operating in smaller units and from 'fixed forward' operating bases. Now, as we draw down in Afghanistan and are out of Iraq, we are going to focus back on the full range of military operations, which include combined arms maneuver, and combined arms maneuver is exactly what Inc2 is optimized for. It is optimized for mobility and offensive operations."

Along with its on-the-move capabilities, Increment 2 also pushes the network down to lower echelons, extending access to the "bigger pipes" of the WIN-T network from battalion down to company level.

The Increment 2 systems that participated in the IOT&E are the result of a March 2010 milestone C decision that authorized low-rate initial production.

Price said that GDC4S has one division headquarters set and eight brigade sets of equipment on order. "We have delivered one division headquarters set to the 101st [Airborne Division] at Fort Campbell [Ky.] and one brigade set to the 2/1 AD [2nd Brigade, 1st Armored Division] at Fort Bliss [Texas]," he said. "Those are the two units that are in the IOT&E."

Swanson said that the results of the Increment 2 IOT&E will help feed a full-rate production decision review now scheduled for September.

"That's when we will go in front of our milestone decision authority to show how we did in IOT&E and that we are ready for full-rate production and fielding of Increment 2 to the rest of the Army," he said. "Assuming we get through that full-rate production decision review successfully, we will start fielding Increment 2 in October focusing on the capability set 13 fieldings for the Army."

He noted that the specific fielding of systems under the Army's Increment 1B/Increment 2 baseline will reflect the mobility needs of the specific units. Maneuver divisions and brigade combat teams with high mobility requirements to fight and operate on the move are to receive Increment 2, while other brigades and nonmaneuver combat units are to be brought up to a 1B capability.

"Even after we field Inc2 we will continue to look at how to improve both Inc2 and Inc1 based on the feedback that we receive from the units and the soldiers themselves," he said. "With Inc2, for example, one of the specific areas we are looking at right now is SWaP, which is size, weight and power. We always want to make things smaller so they have more versatility and agility without losing capability. Another area we are looking at is network complexity: Whatever we have fielded we want to make as simple as possible for the user to operate and maintain."

Along with those improvements, longer-range plans also involve continued development of a WIN-T Increment 3 capability, which will introduce an "aerial tier" with a WIN-T communications payload mounted on unmanned aerial vehicles. Swanson said the introduction of an aerial tier would offload some satellite requirements while adding reliability and capacity. Increment 3 is currently projected for its own milestone C low-rate production decision in FY 2015.

In the meantime, Jim Price reiterated some of the significance of the Increment 2 system to the warfighter. "It's going to mean access to the network," he said, "and the information that they can get off of that network in far more places than they previously could when they were tied to the command post." ★

AUSA's **Institute of Land Warfare** invites you to

GIVE VOICE TO YOUR KNOWLEDGE

The Association of the United States Army's professional education program is designed to identify, discuss and influence the outcome of significant issues that affect the U.S. Army and national defense. AUSA's Institute of Land Warfare (ILW) accomplishes this goal through the sponsorship of writing programs, for which quality manuscripts are needed.

ILW would like to invite you—past and present servicemembers, Army civilians, friends of the Army and others with an interest in and knowledge of national defense—to submit a manuscript to one or more of our writing programs. Membership in AUSA, while always encouraged, is not a requirement for participation.

CALL *for* MANUSCRIPTS

For important information on the Institute of Land Warfare writing program, categories and submission guidelines, please visit http://www.ausa.org/publications/ilw/Pages/WritingProgram.aspx.

AUSA Sustaining Member Profile

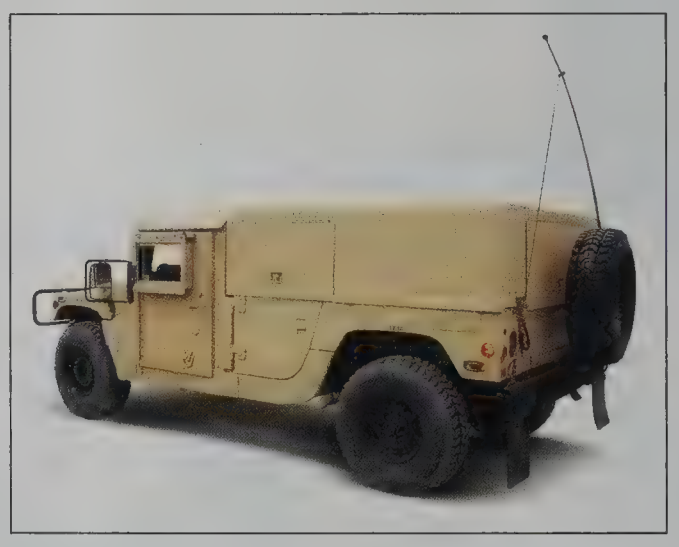
Amtech, LLC

Corporate Structure—President and CEO: Douglas Christie. Headquarters: 180 East Jones Road, Wapato, WA 98951. Telephone: 509-877-2228. Website: www.amtechcorp.com.

Founded in 1987, Amtech, LLC is a recognized leader in the design, development and molding of large complex geometries of composite, vacuum-formed and fiber-reinforced plastics and delivers a full range of molded products and value added services.

Amtech's commitment to product quality and process consistency is evident by its dedication to process-control and quality-management systems. Amtech is proud to have implemented and maintained its International Organization for Standardization (ISO) 9001 quality- and process-management system for the past 15 years.

Amtech has manufactured products for military applications since 1991 and has been honored to serve every branch of the military with custom composite solutions to support light tactical vehicle and light tactical trailer composite molding requirements. Today the company is the decisive leader in its industry and is largely responsible for the widespread adoption and acceptance of composite vehicle and trailer shelters in the military.



Amtech is also recognized as a pioneer in train-the-trainer programs in which Amtech leadership participates in the interaction between its valued customers and technical support teams. This hands-on philosophy assures that the voice of the customer is not diluted by system noise.

Amtech is a privately held, small business whose flagship product line—Helmet Hardtop (HHT)—began its extensive service in 2003 during Operation Iraqi Freedom, when sand storms and winds virtually destroyed the canvas tops and doors then used exclusively on the Humvee. The lockable security and environmental protection provided by the HHT was viewed as essential and saved the government hundreds of thousands of dollars in life cycle and equipment costs in a very short period of time.

The covers' remarkable success and significant support from Army leadership during Operation Iraqi Freedom resulted in a production surge from 40 shelters per month to more than 900 per month. Amtech's quality and delivery performance were ultimately recognized by the Defense Supply Center Columbus when the company was honored with silver awards for excellence in 2005 and 2006.

In addition to its direct support of the Army, Marine Corps, and Air Force intelligence/communications program managers, Amtech has worked closely with world-class integrators and original equipment manufacturers such as AM General, Silver Eagle, Northrop Grumman and General Dynamics to expand the capabilities of their premier platforms. Amtech is also honored to serve the Army National Guard combat support/combat service support task force for the past five years as an active industry partner.

Amtech's capabilities to support our warfighters and valued customers include but are not limited to:

- Staffing of a 3-D modeling and design engineering team.
- Maintaining ISO 9001 registration since 1997.
- Maintaining more than 200,000 square feet of manufacturing and assembly facilities.
- Providing battlefield-proven manufacturing and design.
- Pioneering new and innovative composite molding processes and laminate recipes.
- Leaning forward to fund patented and patent-pending innovations that support Radom designs, shelter mounting hardware and antenna ground plane solutions.

As a leading provider of composite and vacuum-formed assemblies and components, Amtech designs and manufactures custom solutions for the defense industry but also supports many diverse industries such as wind power, transit bus, construction, waste water, cooling tower and recreational vehicle. Through this diversification, Amtech applies lessons learned to bring unprecedented solutions to its valued customers.

A recent example of Amtech's ability to expand upon solutions is its partnership with Silver Eagle Mfg. in Portland, Ore., and the development and manufacture of the climate regulated cargo trailer (CRCT). The CRCT supports and transports climate-regulated cargo, including food, water, medications, blood, plasma and mortuary affairs. This new capability was generated from modules Amtech developed for senior nutrition programs (such as Meals On Wheels) and integrated on Silver Eagle's Light Tactical Trailer proven platform. Silver Eagle now has a rugged, air transportable, sling lift capable, 118-cubic-foot refrigerator/freezer featuring a Thermo King V-300 Max 20 with standby on a proven off-road trailer with riveted aircraft aluminum construction and an independent, torselastic shock-mounted suspension suitable for the toughest terrains.

Advances in new technology, capability and equipment are of continued focus and importance to Amtech, but the company's dedication to integrity, honesty, customer and country are what motivates Amtech, LLC to be the best it can be.

Reviews

Understanding the Fifth Offensive

By COL Cole C. Kingseed
U.S. Army retired

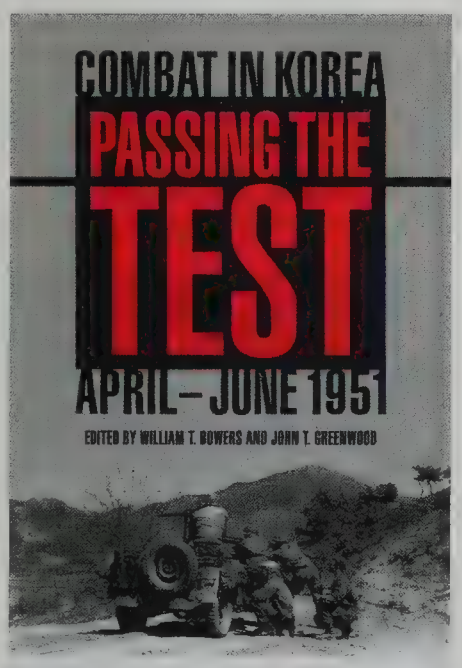
'assing the Test: Combat in Korea, April–June, 1951. *Edited by William T. Bowers and John T. Greenwood. The University Press of Kentucky. 488 pages; black-and-white photographs; maps; notes; index; $40. An AUSA title, Battles and Campaign Series. Publisher website: www. kentuckypress.com*

With the possible exception of the War of 1812, the Korean War is he least understood of this nation's onflicts. The war constituted Amerca's first armed intervention in support of President Harry Truman's polcy to contain the overt threat of the pread of communism. In *Passing the Test: Combat in Korea, April–June, 1951*, ditors William T. Bowers and John T. Greenwood address the fighting that ccurred during the Chinese Communist Spring Offensive, also known as he Fifth Offensive, from late April to arly June 1951. Coincidentally, this peiod coincided with the first three nonths of GEN Matthew B. Ridgway's enure as commander of the United Nations' forces in Korea.

Passing the Test is the third volume in owers' trilogy on the U.S. Army's ombat operation in Korea. As with *The ine: Combat in Korea, January–February 951* and *Striking Back: Combat in Korea, March–April 1951*, *Passing the Test* serves s a monument to the fighting spirit of he individual soldier. In compiling this istory, Bowers and Greenwood rely on yewitness accounts and interviews, ugmented by official records and oprational reports to recreate combat at he lowest levels of the Army.

Roger Cirillo, U.S. Army retired, reatly enhances the text by providing superlative introduction and conclu-on that place the Chinese Fifth Offensive in perspective. Cirillo's comarison of Marshal Peng Dehuai's and idgway's tactics is especially insightful. Ridgway "demanded that no units be sacrificed and ground given when pressed by numbers," whereas Peng, the commander of all Chinese forces, sought to "carve up the enemy forces into many pockets and wipe them out one by one."

Before his untimely death in September 2008, Bowers had completed preliminary drafts of the text and maps for the second and third volumes, so it fell to military historian Greenwood to complete *Passing the Test* and to supervise the manuscript through the publication process. What makes this particular volume so informative is the editors' ability to acquaint the reader with the perspective of the veteran on the front line. *Passing the Test* thus familiarizes the reader with the realities of war and the extremely difficult and highly disconcerting conditions under which small units operate in combat.



Take for example then-WO David R. Reed's depiction of being caught in a Chinese ambush at the very outset of the enemy's spring offensive. Reed's account is painfully gripping as he describes the frustrations he endured along the outpost line on April 22, 1951. Manning a forward observer position, he observed the enemy massing to attack in regimental strength, but his battery "was unable to fire the mission because it was displacing on battalion orders." The subsequent attack penetrated the forward elements of the 1st Republic of Korea (ROK) Division and isolated Reed's artillery battery. Before the artillerymen escaped the ambush, the battery suffered seven killed and 27 wounded.

Adjacent to the 1st ROK Division when the Chinese launched their spring offensive was the British 1st Battalion, the Gloucestershire Regiment, known as the Glosters. When the offensive began along the Imjin River, the Glosters were struck hard and eventually surrounded. Only a few soldiers managed to escape the Chinese encirclement. By the night of April 24, the Glosters had been reduced to fewer than 350 men. By 7:00 the following morning, the Glosters sent a message that enemy buildup in their area precluded the possibility of a relieving force getting through. The battalion commander directed his men to fight their way out, but only 40 men reached the lines of the 1st ROK Division on the afternoon of April 25.

For their actions in the face of overwhelming enemy numerical superiority, the Glosters were awarded a U.S. Presidential Unit Citation. According to the citation, this "heroic force demonstrated superb battlefield courage and discipline. Every yard of ground they surrendered was covered with enemy dead until the last gallant soldier of the fighting battalion was overpowered by the final surge of the enemy."

Overall, casualties during the Chinese spring offensive were excessively high. Though the United Nations Command and Eighth U.S. Army fully expected both phases of the Fifth Chinese Offensive, subordinate commanders continued to press north to gain a new defensive line rather than wait for the inevitable enemy attack. To counter the Chinese onslaught in April, U.N. commander Ridgway traded territory in order to inflict a heavier loss on the enemy. Unfortunately, some units—in-

cluding the 1st Battalion, Gloucestershire Regiment—were virtually annihilated in the process. Ridgway and Eighth Army commander GEN James A. Van Fleet then counterattacked in May and restored the line that had existed before the Chinese offensive.

In the final analysis, United Nations forces inflicted a significant defeat on the Chinese forces. Marshal Peng Dehuai later admitted that the Fifth Offensive witnessed the highest losses the Chinese suffered in the course of the Korean War. Rather than concentrating massed forces to defeat division-size elements of the U.N. command, after May 1951, Peng used massed manpower to destroy small individual United Nations units. Following the Fifth Chinese Offensive, the war would witness a new aspect at the tactica level, one predicated on the desire t fight while negotiating. The reader ca only hope that additional volumes i the *Combat in Korea* series will addres this phase of the war.

***COL Cole C. Kingseed**, USA Ret., Ph.D., former professor of history at the U.S. Military Academy, is a writer and consultant*

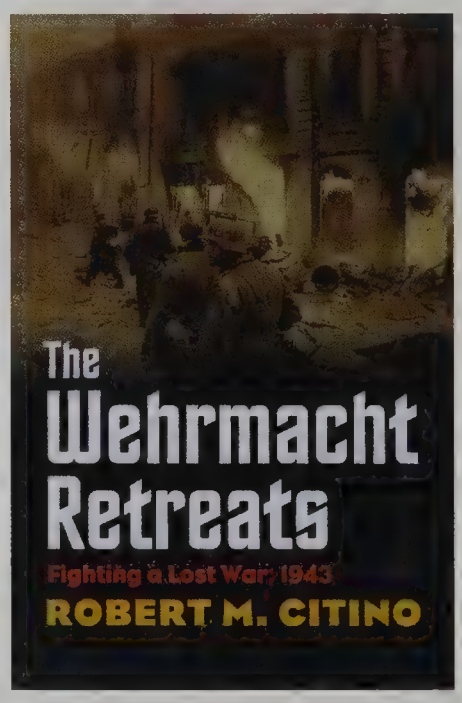
Reconsidering a Forgotten Year

The Wehrmacht Retreats: Fighting a Lost War, 1943. *Robert M. Citino. The University Press of Kansas. 410 pages; black-and-white photographs; maps; notes; index; $34.95. Publisher website: www.kansaspress.ku.edu.*

By COL Kevin W. Farrell

With the dawn of the year 1943, the military fortunes of Nazi Germany appeared decidedly bleak. Gen. Friedrich Paulus' Sixth Army, the vanguard of Hitler's renewed 1942 offensive deep into southern Soviet Union, was trapped and destined for ultimate destruction at Stalingrad in one of the most important—arguably *the* most important—defeats for Germany in World War II. Along the entire Eastern front in the Soviet Union the German line seemed poised on the verge of collapse. Perhaps even more ominously for the Germans, a powerful Anglo-American force had secured most of North Africa, threatening extinction of Rommel's famed *Afrika Korps*. It seemed to be only a matter of time before Hitler's Third Reich would be crushed between the inexorably growing might of the Grand Alliance of the Soviet Union, Great Britain and the United States. In the end, however, despite a year of serious defeats and setbacks for the German war machine, the Allies failed to make the year decisive. Why and how that was the case forms the framework of Robert Citino's masterful operational analysis of the great land campaigns of the German Wehrmacht in the year 1943.

Building on the foundation he laid in two of his recent works, *The German Way of War: From the Thirty Years' War to the Third Reich* and *Death of the Wehrmacht: The German Campaigns of 1942*, Citino again demonstrates why he is the premier English-language authority writing on the operational performance of German ground forces in World War II. Reaffirming that there was indeed a German way of war, most notably in the war of movement at the operational level dating to



the 18th century, Citino argues that the German military establishment, "historically configured for *Bewegungskrieg*—violent aggression, relentless assault, and mobile operations," was "suddenly and unexpectedly" forced into defensive operations. The Germans' remarkable response to this turn of events explains why 1943 was a year of defeats, but not one of overall defeat despite the Allies' advantage in manpower and materiel. As Citino tells it, fighting a war of attrition was synonymous with "losing slowly," and Germany's leaders had historically—and rightly—feared th two-front war, as was powerfully evi dent in World War I. Because of it strategic and economic predicament Germany's only hope for victory wa through rapid and decisive battles de stroying the enemy's main body withi weeks of the opening campaign. Thi failed to happen in 1941 or 1942, an by 1943 any chance of it happenin was remote indeed.

Much of the material covered in *Th Wehrmacht Retreats* will be quite famil iar to students of World War II. Wha is new, however—and why this boo is essential reading for anyone inter ested in the military campaigns of th war—is the context into which Citin places the critical battles of 194 Rather than treating them in isolatio or seeking the definitive "turnin point," this exciting new work show how the Germans continued to figh so well in a war that was already lost Beginning with the Tunisian campaig and the mixed performance of the Al lies (in particular the Americans), Ci tino then turns to the brilliance of Fiel Marshal Erich von Manstein and th Battle of Kharkov. Treating Manstei objectively, Citino characterizes one c his most famous victories as a "brie glimpse of victory" and closes with vivid postscript: "The winter cam paign of 1943, far from serving as display of individual or collective ge nius, offers us instead the fascinatin spectacle of two armies trapped, lik helpless prey, in the talons of thei own doctrine."

Whereas all chapters are informa tive and authoritative, perhaps th best is "The Battle of Kursk: A Re

assessment." Building on important work by other scholars, Citino removes enduring myths surrounding this battle, frequently cited as the greatest tank battle of all time. The actual number of tanks involved was less than generally portrayed, although the battle was indeed a significant defeat for Germany. Whether it was a turning point is moot, and Citino argues that given Germany's overall strategic situation, Hitler's decision to call off the offensive made sense. Furthermore, Citino suggests that arguments as to which army was better are meaningless: "In 1943, the Wehrmacht still had a great number of strengths: a highly trained, devoted and aggressive officer corps; manpower ready to die in great numbers ... and equipment that enjoyed a clear qualitative edge." The Soviets had many positive qualities as well, including a competent high command and increasingly more capable field-grade officers, and "one last, crucial advantage"—size. As Citino puts it, "Size really does matter, and quantity really does have a quality all its own."

The rest of the book capably covers other important campaigns, including the final campaign in Tunisia, Sicily and Field Marshal Albert Kesselring's skillful defense of Italy, which Citino objectively critiques. It is a minor disappointment that the final six months of 1943 in Russia receive only a single chapter, but the enormity of the Russian front warrants a book of its own. Through it all Citino's writing is clear and accessible. Whether the reader is a serious military historian, a serving soldier or the casual military history buff, the prose is perfect. Added benefits are excellent photos and maps. All too often books on this period recycle familiar photos, but those presented in *The Wehrmacht Retreats* are either rare or previously unpublished. The excellent operational maps for which Citino has become famous provide the right amount of context and detail without being either too dense or too vague, something surprisingly rare in contemporary military histories.

The issue of why the Wehrmacht fought so well and yet ultimately lost is one of recurring interest to military historians. *The Wehrmacht Retreats* is essential reading for those seeking to understand it. Citino's contribution stands as the definitive operational analysis of the Wehrmacht in 1943—let's hope that he tackles 1944.

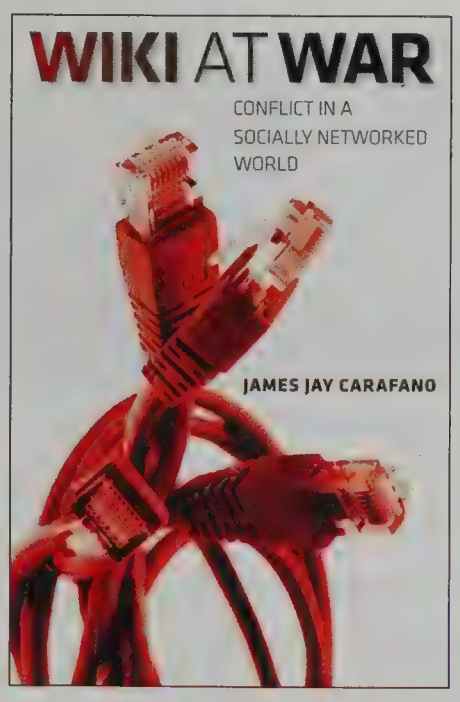
***COL Kevin W. Farrell**, Ph.D., is chief of military history at the U.S. Military Academy. He commanded a combined arms battalion in Iraq. His most recent book is* The Military and the Monarchy: The Case and Career of the Duke of Cambridge in an Age of Reform.

Varied Fare

Wiki at War: Conflict in a Socially Networked World. *James Jay Carafano. Texas A&M University Press. 326 pages. Website: www.tamupress.com.*

James Jay Carafano's *Wiki at War: Conflict in a Socially Networked World* is an intriguing book. Carafano covers many topics in a solid effort to describe the need for focused study on this new theater of war: cyberspace. Carafano implies there is a "compelling theoretical explanation" for how social networking might affect 21st century warfare. In both prologue and conclusion he states there is a war to be won, although he leaves it to the reader to discern what the theory of "wiki war" might be.

My take on his theory is: Given there is "high ground" in the cyber domain—best described as the opposite ends of a power distribution curve—the nation with the most resilient network strategy to win the information war at one or both ends of the curve has the best chance for survival and victory. Carafano goes on to define the left end of the curve as the place in a social network where an active few can influence the many. The right end is where, as he cleverly puts it, "Boyd's OODA [observe, orient, decide and act] can really throw things for a loop." The right end of the curve



is where small groups using social networking can come together to make decisions on national security very swiftly and act equally swiftly.

Carafano's prologue, "Mad Scientists and Fighter Pilots," sets the stage for the following seven chapters, wherein he touches on the history of the Internet, the need for thinking to precede action in the cyber domain, how to develop the genius required to develop cyber leaders for the future, what might be beyond Web 2.0, and balancing the security of the network with personal freedom. Regarding the last point, he clearly favors prudent and limited government action, that is, that government can act best by leaving the "net" itself a region of freedom for citizens and private industry. He cites examples of how individuals reported on unfolding events, among them the 2009 Iranian protests and the death of Neda Agha-Soltan, by way of social media.

Carafano's targeted audience is national security professionals, and the style of writing and chapter design demand that the reader pay attention. I had to put the book down to reflect on content after reading each chapter.

I was reminded of Sun Tzu's admonition that the study of warfare is mandatory for the survival of the state. Carafano points out the very serious nature of war in the cyber domain, a war that is upon us right now. He also observes that with regard to public policy "the impulse to embrace compelling stories rather than hard numbers is

winning the day" and calls for more balance in the arguments put forth in the virtual public square. Carafano's proposals demand sober reflection. Nonetheless, the service Carafano renders with this book is important.

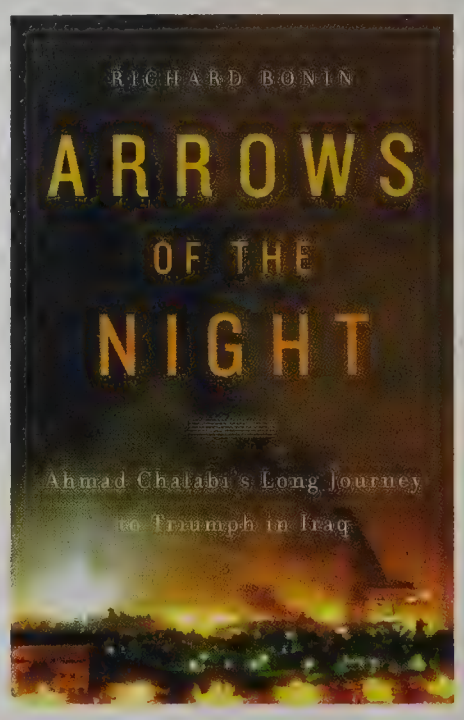
Carafano makes a real contribution to the national discourse on cyber security and national security. He offers four modern methods of analysis, from scenario-based planning to the Delphi technique, that provide a structure for the critical thinking required to develop a real theory of cyber war and how to use this theory to develop strategy. His observations are pragmatic as is his call for action on the part of the government, private industry and an informed citizenry.

Throughout *Wiki at War*, Carafano emphasizes that thought must precede action. The campaign for the high ground of the cyber domain is ongoing, and there is a war to be won. National security professionals should read and reflect on the subject of this book.

—COL Kevin Benson, USA Ret.

Arrows of the Night: Ahmad Chalabi's Long Journey to Triumph in Iraq. *Richard Bonin. Doubleday. 262 pages; index; $27.95. Publisher website: www. randomhouse.com.*

As its subtitle indicates, *Arrows of the Night* is a biography of Ahmad Chal-



abi, but it also serves as a study of how our country was drawn into invading Iraq.

Richard Bonin's tale of history, intrigue, duplicity and war shows that the two accounts are inseparable.

The Chalabi family has been prominent in Iraqi history since the Ottoman Empire and the reign of King Faisal I. When the monarchy was overthrown in 1958, Ahmad's father was the richest man in Iraq, possessing vast landholdings and a business empire. Ahmad was accustomed to luxury and power at the highest level. With the emergence of Saddam Hussein, the Chalabis were forced into exile, still with wealth to live very comfortably, but without power. Ahmad, although a teenager at the time, swore he would restore the Chalabis to what he deemed their rightful place in Iraq.

The path of Chalabi's journey was fraught with success and failure. He started at a peak with his family's prominence. Then came the valley of exile and failure of the first attempt to overthrow Saddam. In 1978, with his brothers, he established the Petra Bank in Jordan, which ballooned in assets from $40 million to more than $900 million in five years. Never able to stay away from intrigue, however, he led the bank to bankruptcy, accused by Jordan of fraud, forgery and embezzlement, among other counts. He escaped, hidden ignominiously on the floor of a car. He was then tried in absentia and sentenced to 22 years in prison.

Chalabi first met U.S. neoconservatives in 1991 through a mutual acquaintance, Bernard Lewis, a scholar at Princeton and guru to many in government. Chalabi impressed Richard N. Perle, Paul D. Wolfowitz and their coterie with his charm and brilliance. In responsible staff positions in DoD, and with the invasion of Kuwait by Saddam, these men were intent on finding a way to topple the Iraqi leader. Chalabi convinced them that he was the person around whom to rally an Iraqi government-in-exile. As a student of history, he likened himself to Charles de Gaulle, who established a government-in-exile, then used the United States and allies to topple his arch enemy and place himself in power. This, Chalabi decided,

Save Time and Register Online

- Go to **www.ausa.org** and click on the small Annual Meeting image or the Annual Meeting link
- Fill out the registration form and click "Submit"
- Print your confirmation with your personalized bar code
- Bring this with your government-issued photo ID to the Registration Desk to pick up your badge

See you there!

22-24 OCTOBER 2012 • WASHINGTON, D.C.

ASSOCIATION OF THE UNITED STATES ARMY
2425 Wilson Boulevard • Arlington, VA 22201
(703) 841-4300 • (800) 336-4570 • www.ausa.org

2012 AUSA
ANNUAL MEETING AND EXPOSITION
A Professional Development Forum

22-24 OCTOBER 2012 • WALTER E. WASHINGTON CONVENTION CENTER • WASHINGTON, D.C.

2012 ADVANCE TICKET ORDER FORM

Advance ticket orders available to members only

ORDERS MUST BE RECEIVED BY 28 SEPTEMBER 2012

Advance ticket purchases with badges will be held for pickup at the Ticket Pickup Counter of the Walter E. Washington Convention Center.
A government-issued photo identification will be required for pickup.

SPECIAL NOTE: SEPARATE TICKETS ARE REQUIRED FOR EACH FUNCTION.
BADGES AS WELL AS TICKETS ARE REQUIRED FOR ADMISSION TO ALL FUNCTIONS.

Function	Quantity	Price	Amount
Guard/Reserve Breakfast (22 Oct.)	_____	$40.00	_____
President's Reception (22 Oct.)	_____	$50.00	_____
Eisenhower Luncheon (23 Oct.)	_____	$60.00	_____
Army Civilians' Luncheon (24 Oct.)	_____	$50.00	_____
Marshall Memorial Reception (24 Oct.)	_____	$45.00	_____
Marshall Memorial Dinner (24 Oct.)	_____	$95.00	_____

Payment must accompany this order • Please print or type
No refunds for ticket orders cancelled after **28 SEPTEMBER 2012**
Cancellation in writing only

Total Amount $ _____

Americans with Disabilities Act (ADA): Check here ❑ if you need special arrangements.

AUSA MEMBERSHIP NUMBER

RANK	FIRST NAME	INITIAL	LAST NAME	PHONE NO.
UNIT, CHAPTER, OR TITLE/COMPANY, ETC.				
ADDRESS (REQUIRED)			STATE ZIP	COUNTRY
FAX			E-MAIL	
GUEST NAME – PLEASE ATTACH SEPARATE SHEET FOR ADDITIONAL GUESTS				

PAYMENT BY: **❑ CHECK** **❑ VISA** **❑ MASTERCARD** **❑ AMEX**

CARD EXPIRES **MO.** **YR.**

SIGNATURE _____

www.ausa.org

MAIL TO: Association of the United States Army
P.O. BOX 101560
Arlington, VA 22210-0860

FAX TO: 703-243-2589

would be his method also, using both the United States and Iran.

Chalabi established the Iraqi National Council (INC) in Kurdistan as his government-in-exile. It had—depending upon who was counting—between 500 and 5,000 members; this was his front. He obtained funds first from the Central Intelligence Agency, which wanted a place inside Iraq. When the CIA funds were stopped, his friends in Congress arranged funding from the Defense Intelligence Agency. INC purported to be delivering intelligence for which they were being paid.

Never shy about using his contacts, he cultivated favor of Perle and Wolfowitz, who rose to positions of influence within the government. Chalabi also realized the power of the press and appeared frequently either in print or television to advance his cause and keep his name before the public. For the next 10 years he moved in higher and higher circles in the U.S. government, in Congress and the Department of Defense, as his well-placed sponsors became more and more influential. Wolfowitz became deputy secretary of defense and Perle, assistant secretary for policy. After 9/11, the pressure grew even more intense to get rid of Saddam, and this suited Chalabi perfectly. His Iraqi contacts produced "evidence" of weapons of mass destruction and of Saddam's connection to al-Qaeda, both proven later to be spurious. For a while, his supporters continued to provide him with funds.

How Chalabi rose and fell during the 45 years it took him to return to Baghdad makes for an incredible tale. He played a dangerous game using both the United States and Iran for his own purposes. In the end, his perfidy lost him standing in both countries. Despite the many peaks and valleys of his journey, he returned to Baghdad, where he lives today. He has no power, however, and no following among Iraqis. He lives in hollow luxury in an enclave surrounded by a privately financed security force of hundreds.

Bonin, who had come in contact with Chalabi through the years in the course of producing several "60 Minutes" segments about him, knows his subject well. He has done diligent research and produced a compelling narrative that also reveals a very disturbing insight into just how Washington works.

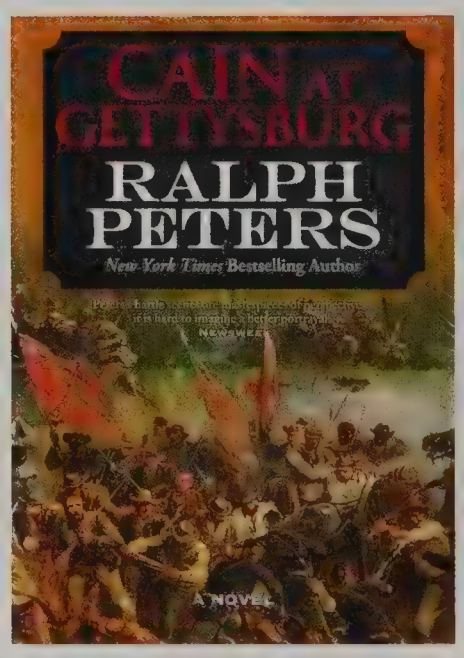
The phrase "arrows of the night" refers to the Shia practice of asking that their prayers be answered and returned upon their enemies, like arrows in the night. Perhaps in this sense Ahmad Chalabi has won, his prayers answered.

He is, after all, in Baghdad, and Saddam Hussein is gone.

—Nancy Barclay Graves

Cain at Gettysburg. *Ralph Peters. Tor Forge. 432 pages; $25.99. Publisher website: http://us.macmillan.com.*

During the American Civil War, Union and Confederate soldiers would talk about seeing "the elephant." The elephant was their term for being under enemy fire, a euphemism for the overwhelming experience and emotion of combat.



In his new novel, *Cain at Gettysburg*, award-winning author Ralph Peters offers a vivid story of Civil War combat. From the individual viewpoint of the lowest-ranking soldiers to the perspective of the opposing generals, war is seen for what it is: dirty, exhausting, chaotic, brutal and a race against time. Peters' emotionally powerful descriptions capture the feel of the battle and throw the reader into the center of this no-holds-barred war.

The spirit of the Battle of Gettysburg is here, awaiting the reader's discovery of what it was like to be a soldier in this unforgiving fight. Why did these men fight, kill and die? How do men act in such hellish and stressful situations when minie balls and cannonballs are tearing through the ranks of friends and brothers? Spend some time with the fictional character SGT Tom (Quaker) Blake, as well as historical figures such as Confederate GEN James Longstreet, Union artillery general Henry Hunt and Union commanding general George Meade.

Peters sets the scene in the mud, rain and blood for the moment when Confederate commanding general Robert E. Lee makes the decision to go all in and end the war in one final, decisive attack. Longstreet reluctantly does his duty, though he opposes the plan and sends his men forward on what would become known as Pickett's Charge.

"I do not want to make this charge. I do not see how it can succeed," Longstreet mutters. "I would not make it now but that GEN Lee has ordered it and expects it." When the long lines of troops advance in perfect line of battle, shouting the awe-inspiring rebel yell, they melt under the withering fire of the Yankee line. Lee then stands in front of his troops and says, "It's all my fault," and GEN Meade rides in front of his victorious troops, knowing only too well the bloody cost of victory and what a near-run thing this battle has been.

Cain at Gettysburg deserves to be on your must-read list. The story of this fight is worth retelling, and Peters does a masterful job of bringing it to life. Peters' remarkable capacity for seeing and judging the true sentiments of people and events is remarkable. The characters come alive. Leadership, tactics, fear, cowardice and courage are all here, rolled up into one memorable and authentically composed epic novel. The action is incisive, and the historical events are lucidly explained. Peters describes seeing the elephant better than any other author I know of, and in *Cain at Gettysburg* he has crafted a timeless exposition of war that will grip you from start to finish.

—COL John Antal, USA Ret.

Historically Speaking

Harrison's Landing at 150

By BG John S. Brown
U.S. Army retired

July 2nd marks the 150th anniversary of the withdrawal of MG George B. McClellan's demoralized Army of the Potomac into Harrison's Landing along the banks of the James River in Virginia. This brought the ambitious Peninsular Campaign of 1862 to an inglorious end, forcing more years of Civil War fighting. The Peninsular Campaign featured larger forces used timidly and incoherently and smaller forces employed aggressively and decisively. The Confederate strategy and the collateral Shenandoah Valley Campaign remain case studies in effective active operational defense. The twin campaigns also marked the rise of two American military icons, Generals Robert E. Lee and Thomas J. (Stonewall) Jackson.

Shortly after the Union disaster at Bull Run in July 1861, as discussed in the July 2011 issue, McClellan assumed command of what became the Army of the Potomac. He proved an able organizer, trainer and administrator, and within a few months fielded a well-equipped and capable force of over 150,000. McClellan proved less capable as an operational commander. Although actually outnumbering Confederate BG Joseph E. Johnston's forces at Centreville by more than three-to-one, in his own mind he inflated Johnston's strength to the point that he dared not attack him. Instead, he proposed to outflank Johnston with an ambitious amphibious operation that would march on Richmond from the Atlantic rather than from Washington, D.C.

President Lincoln reluctantly agreed to McClellan's seaborne turning movement with the significant caveat that Washington would always remain adequately protected. This effectively reduced the force potentially available to deploy with McClellan by about a third. Various plans existed for the 30,000–40,000 men left behind with MG Irvin McDowell's Washington-based I Corps to later come to McClellan's assistance, but these were recurrently disrupted by Jackson's brilliant campaign up and down the Shenandoah Valley. Jackson's small but capable army of less than 18,000 drew in and tied up more than 70,000 Federal troops, largely to ensure he did not march on the national capital. Jackson himself marched and countermarched to win striking victories over fragments of the forces opposing him at McDowell, Front Royal, Winchester, Harpers Ferry and Port Royal.

Beginning on March 17, McClellan's Army of the Potomac, less McDowell, deployed by sea to Fort Monroe. A preliminary clash between the innovative ironclad vessels USS *Monitor* (for the Union) and CSS *Virginia* (for the Confederacy)

On July 1, 1862, Federal artillery defeated Confederate infantry below Malvern Hill, giving Union forces the chance to pull back to Harrison's Landing on the James River and board transports, ending the Peninsula Campaign.

Clockwise from right, Stonewall Jackson pursued the rear guard of Union forces, and on June 30, 1862, the two sides battled at White Oak Swamp. Jackson's force was stopped by heavy fire at a stream crossing and could not join in a converging attack that Lee planned for nearby Glendale. Twin chimneys are all that remain of the Methodist Parsonage, a landmark denoting Confederate positions preceding the Battle of Malvern Hill, the last of the six major battles that compose the Seven Days Battle. A memorial to Robert E. Lee is among the historical statuary located in central Richmond.

left the waters off Hampton Roads in Union hands. McClellan began an advance up the peninsula between the York and James Rivers in early April, only to encounter an entrenched line extending across the peninsula from Yorktown to the Warwick River and along that river to the James. McClellan outnumbered BG John B. Magruder's 15,000 defending Confederates by seven-to-one, but didn't know it. Magruder kept up an impression of greater strength by shuttling forces along the front, conducting feints and employing such devices as dummy guns made from felled trees painted black. Rather than take a chance, McClellan called for reinforcements, amassed a huge stockpile of artillery and artillery ammunition, conducted formal siege operations and prepared for a massive bombardment focused on Yorktown. A day-and-a-half before this massive bombardment was to begin, Johnston pulled Magruder out, leaving a delaying force about eight miles farther up the peninsula under MG James Longstreet while retiring with his main body to the outskirts of Richmond.

Longstreet's delaying force gave a good account of itself, inflicting a sharp repulse of an initial Union assault near Williamsburg on May 5 before retiring under the cover of darkness rather than allowing itself to be enveloped. Meanwhile, a division-sized Union amphibious thrust up the York River was attacked and defeated at West Point, Va., by Confederates operating on interior lines. McClellan slowly and laboriously pursued Johnston, impeded by rains, muddy roads and his own anxieties. By May 25 he was in sight of Richmond, with three corps to the south of the swollen Chickahominy River and three corps to the north of it. Those on the north side were to effect a link-up with McDowell. McDowell, delayed by Jackson, never arrived. Although outnumbered five-to-three, Johnston resolved to take advantage of the Union's split disposition and overwhelm McClellan's forces south of the Chickahominy. The result was the well conceived but poorly executed assault at Fair Oaks, also

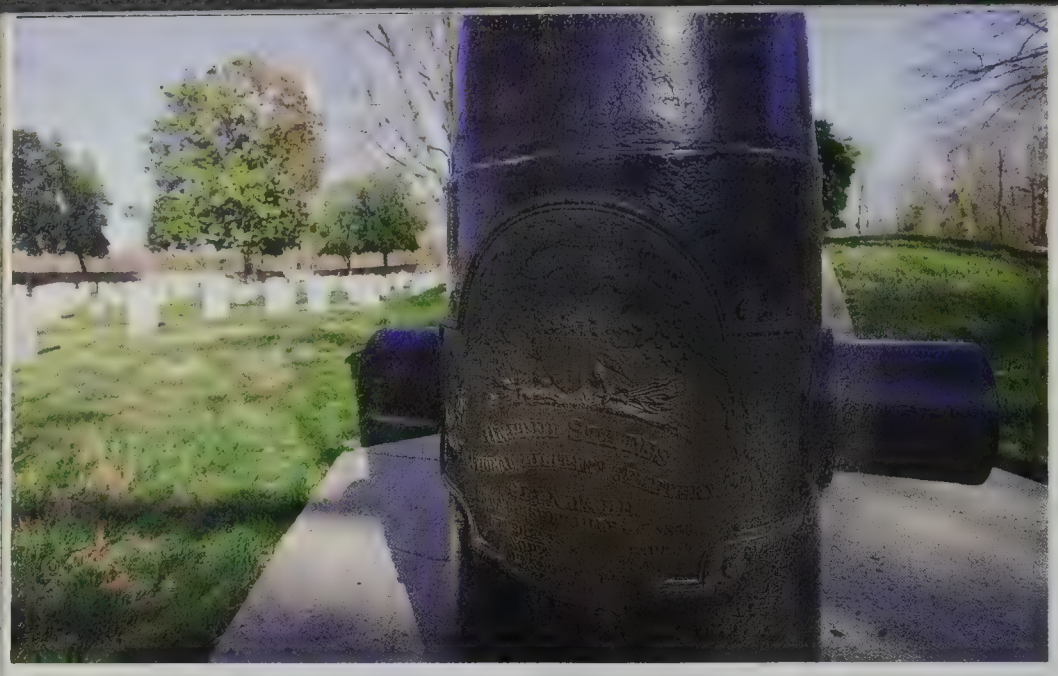
---

***BG John S. Brown**, USA Ret., was chief of military history at the U.S. Army Center of Military History from December 1998 to October 2005. He commanded the 2nd Battalion, 66th Armor, in Iraq and Kuwait during the Gulf War and returned to Kuwait as commander of the 2nd Brigade, 1st Cavalry Division, in 1995. He has a doctorate in history from Indiana University. His book,* Kevlar Legions: A History of Army Transformation 1989–2005, *was published in 2011.*

Clockwise from top, the Battle of Gaines' Mill/First Battle of Cold Harbor continued the Seven Days Battle on June 27. A concentrated Confederate attack at dusk drove Union forces back. The attack did not, however, have the momentum to pursue the retreat. Nevertheless, Gaines' Mill was a Confederate tactical victory, convincing MG George McClellan to withdraw. A ripped drum and Confederate battle flag are displayed at the Museum of the Confederacy in Richmond, Va. The grave of Confederate cavalry GEN J.E.B. Stuart is at Richmond's Hollywood Cemetery.

known as the Battle of Seven Pines, on May 31. In two days of fighting the losses were equivalent, but the violence of the assault further convinced McClellan he was facing equal—perhaps even superior—Confederate forces.

The most consequential Confederate loss at Fair Oaks was Johnston, who was seriously wounded in the fighting. GEN Robert E. Lee, the man President Jefferson Davis appointed to replace Johnston, assumed command the following day. McClellan dithered before Richmond for more than three weeks, soliciting reinforcements and garnering artillery for what he proposed to be a siege of the city. He did not seem to have been seeking a pitched field battle or a determined offensive. Meanwhile Lee dispatched his celebrated cavalry commander, BG J.E.B. Stuart, on an extended reconnaissance in force that ultimately rode around the entire Union army. Stuart destroyed large quantities of sup-



Clockwise from lower left, a pyramid marks the main Confederate grave section at Hollywood Cemetery. A small U.S. National Cemetery today stands in Glendale, Va. Confederate President Jefferson Davis' gravesite at Hollywood Cemetery is marked by his statue and a Confederate flag.

plies en route, and confirmed Lee's calculation that McClellan had so reinforced his forces south of the Chickahominy after Fair Oaks that he was now weak north of that river.

Lee arranged for Jackson to hastily redeploy to just north of the Chickahominy, leaving a small covering force behind in the Shenandoah Valley. He similarly left a small force masking the bulk of McClellan's army, and led most of his own army to the north bank of the Chickahominy. Falling on MG Fitz John Porter's isolated V Corps at Mechanicsville (June 26) and then at Gaines' Mill (June 27), Confederate attacks forced a Union withdrawal across the Chickahominy. McClellan decided upon a further withdrawal to the James River. Lee pursued, precipitating sharp actions at Peach Orchard, Savage's Station, White Oak Swamp and Frayser's Farm. Porter turned in a creditable success when defending Malvern Hill on July 1, but McClellan nevertheless continued his precipitate retreat to Harrison's Landing and the ostensible protection offered by Union gunboats.

Ironically, the butcher's bill tallied higher for the Confederates than for the Union during the so-called Seven Days' Battles from June 25 to July 1, but McClellan's army nevertheless ended up huddled within its defenses around Harrison's Landing. It would ingloriously redeploy to Washington and effectively be out of the war for two months. Lee's Army of Northern Virginia gained a morale superiority it would retain for some time. With McClellan momentarily neutralized, the stage was set for a decisive blow against Union forces remaining in Northern Virginia. Perhaps the war could even be carried out of Virginia altogether and into Union territory. The Union had forfeited an opportunity to strike a decisive blow and overwhelm a heavily outnumbered opponent. Lee and Jackson had emerged as superstars, and so they would remain. ★

Recommended Reading:

Esposito, Vincent J., *The West Point Atlas of American Wars, Volume I: 1689–1900* (New York: Frederick A. Praeger, 1959)

Foote, Shelby, *The Civil War, A Narrative, Vol. I: Fort Sumter to Perryville* (New York: Random House, 1958)

McPherson, James M., *Battle Cry of Freedom: The Civil War Era* (New York: Oxford University Press, 1988)

PUBLICATIONS
from the Institute of Land Warfare

Defense Reports
- DR 11-4 – Unleashing Unlimited Potential: The Army Warrior Care and Transition Program in 2011 (October 2011)[1]
- DR 11-3 – Network Integration Evaluations: Developing Technologies with the Army's Industry Partners (October 2011)[1]

Landpower Essays
- LPE 11-2 – Laying the Groundwork for the Army of 2020 by General Robert W. Cone (August 2011)[1]

Land Warfare Papers
- LWP 88W – The Spider Webs and the Lion: How Energy and Environmental Issues Entangle China by Colonel Mark Lee (May 2012)[2]
- LWP 87 – Historical Lessons Applied to the Current Technical Revolution in Military Affairs by Major Benjamin Huebschman (March 2012)[1]
- LWP 86 – Applying Natural System Metaphors to the Force Modernization Process by Colonel K. Todd Chamberlain (February 2012)[1]

National Security Watch
- NSW 12-2 – The Rationale for a Robust U.S. Army Presence in the Pacific Basin by Nicholas Krueger (March 2012)[1]

- NSW 12-1W – Thinking About the 21st Century Security Environment: The Need for a Whole-of-Government Approach by General Gordon R. Sullivan, USA Ret. (January 2012)[2]

NCO Update
- Budget Cuts Affect NCOs' Reenlistment Opportunities[3] (2nd Quarter 2012)[1]
- Tax Credits to Benefit Veterans Signed into Law[3] (1st Quarter 2012)[1]
- Three NCO Leaders Honored with Strickland Award[3] (4th Quarter 2011)[1]
- New NCO Promotion Points System Instituted[3] (3rd Quarter 2011)[1]

Special Reports
- AUSA + 1st Session, 112th Congress = Some Good News (January 2012)[1]
- Fiscal Year 2012 Army Budget – An Analysis (October 2011)[1]
- Profile of the U.S. Army 2010: a reference handbook (July 2010)[1]
- Your Soldier, Your Army: A Parents' Guide by Vicki Cody (also available in Spanish)[1]

Torchbearer National Security Reports
- A New Equipping Strategy: Modernizing the U.S. Army of 2020 (June 2012)[1]
- Modernizing LandWarNet: Empowering America's Army (May 2012)[1]
- U.S. Army Space Capabilities: Enabling the Force of Decisive Action (May 2012)[1]
- The U.S. Army Squad: Foundation of the Decisive Force (October 2011)[1]

Torchbearer Issue Papers
- First Army: Training for Today's Requirements and Tomorrow's Contingencies (April 2012)
- Third Army: Empowering Theater Responsiveness by Synchronizing Operational Maneuver (March 2012)
- U.S. Army North/Fifth Army: Building Relationships for a Secure Homeland (December 2011)[1]

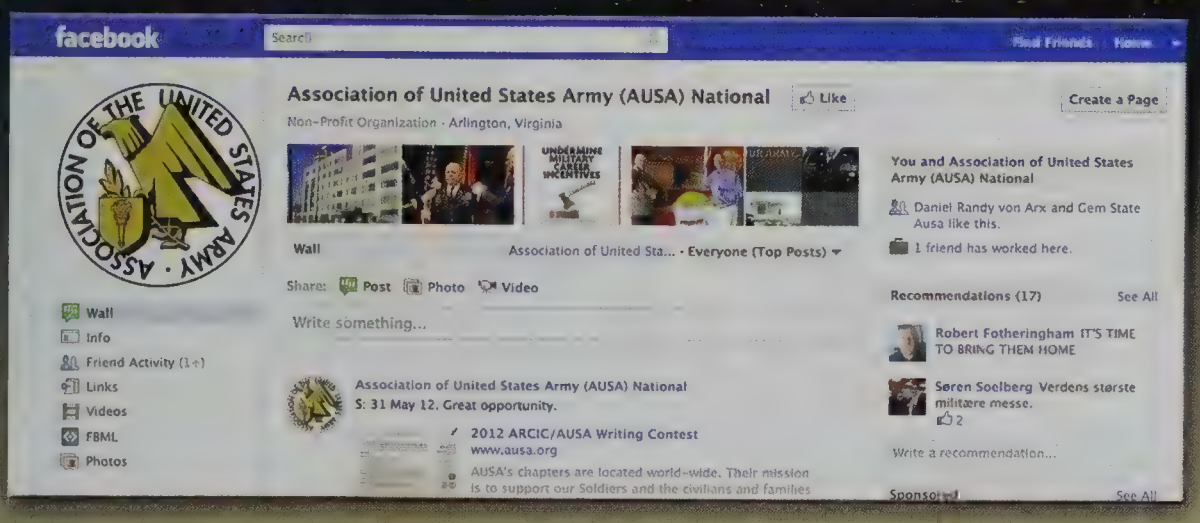
Torchbearer Alerts
- Breaking the Faith (February 2012)[1]
- U.S. Army Retirees: Retired Pay and Health Care at Risk (September 2011)[1]

All publications are available free of charge at:
www.ausa.org/publications/ilw

To order these and other ILW publications, visit the Institute of Land Warfare at the AUSA website (www.ausa.org); send an e-mail to **ILWPublications@ausa.org**; call (800) 336-4570, ext. 4630; or write to AUSA's Institute of Land Warfare, ATTN: Publication Requests, 2425 Wilson Boulevard, Arlington, VA 22201-3326.

[1] Available on AUSA website at www.ausa.org/ilw.
[2] Available ONLY on AUSA website at www.ausa.org/ilw.
[3] Lead story.
[4] Winner of the 2011 AUSA/Army Capabilities Integration Center (ARCIC) writing contest

AUSA is on Facebook



Association of the United States Army (AUSA) National

Go to the AUSA website: www.ausa.org

Click on Find us on Facebook ***at the bottom of the page.***

If you have a Facebook page, become an AUSA "friend."

To become a friend, you must have a Facebook account.

Happy 4th of July!

ITT EXELIS

THE POWER OF INGENUITY

It's the dawn of a new day for mission success.

For more than 50 years, ITT Exelis has earned the reputation as the world leader in breakthrough night vision technology. We are committed to supporting those on the front lines with the most reliable and highest resolution Gen 3 night vision systems and tubes in the world. The Exelis Gen 3 image intensifier has a longer tube life and better performance in extreme low light conditions than anything else on the market. To learn more, visit **www.exelisinc.com** and search **Night Vision**.

www.exelisinc.com

Exelis and "The Power of Ingenuity" are trademarks of Exelis Inc.
ITT is a trademark of ITT Manufacturing Enterprises, LLC., and is used under license.
Copyright © 2012 Exelis Inc. All rights reserved.

Photo courtesy of Tech. Sgt. Efren Lopez

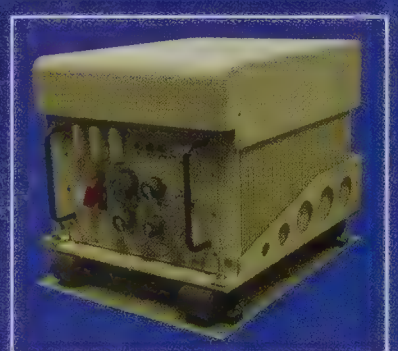
IED protection that goes wherever you go.

The IED threat is always there. And with CREW Duke, so is your protection against it. Invented by SRC and manufactured by SRCTec, this is a tactically superior, state-of-the-art jamming system that gives you:

- Simple operation with minimal power requirements
- High reliability and optimal performance
- Most widely fielded CREW system
- Innovation worthy of the Army's Top 10 Greatest Inventions Award

So when you're in the field, your best protection is right there with you.

To find out more, visit **www.srcinc.com/CREWDuke.**



CREW Duke

Redefining possible

SRC

Defense • Environment • Intelligence

© 2012 SRC, Inc. All rights reserved.

The Magazine of the Association of the United States Army

ARMY

Education Periodicals
[non-circulating]
355.05 UNC
v. 62, no. 8 (2012)

Aug usa.org

$3.00

**********AUTO**ALL FOR ADC 604
116399 20130531 20120801
ACQUISITIONS DEPT.C03323593 0001
ACQUISITIONS DEPT.C03323593 001758
1408 W GREGORY DR P000007
URBANA IL 61801-3607 01:025692

When your only link between a mission and a homecoming is your relationship with a vehicle,

TECHNOLOGY is personal.

Considering the lengths our National Guardsmen will go for others, we're more than glad to go the distance for them. And we're proud to go the distance for them. Anytime. Anywhere. We offer the very best training and service for every world-class vehicle and technology we provide. Wherever they need us. Yes, technology is personal. It's very personal.

OSHKOSH DEFENSE

Visit Oshkosh Defense at NGAUS – Booth 1103

oshkoshdefense.com

©2012 OSHKOSH CORPORATION Oshkosh and the Oshkosh logo are registered trademarks of Oshkosh Corporation, Oshkosh, WI, USA

INN_TECH_002_2012-US-

ARMY

MAGAZINE

AUGUST 2012
VOL. 62, NO.8

PUBLISHED BY THE ASSOCIATION OF THE U.S. ARMY

www.ausa.org

FRONT & CENTER

Thoughts on Strategic Thinking
By GEN Frederick J. Kroesen, USA Ret.
Page 19

Rethinking the Army's Way Forward
By BG Huba Wass de Czege, USA Ret.
Page 20

GEN Gordon Sullivan Receives Goodpaster Award
Page 21

Reviewing Arguments for and Against AirSea Battle
By Richard Hart Sinnreich
Page 23

The Changing Face of Network Integration Evaluations
By Scott R. Gourley
The evolution of the Network Integration Evaluation (NIE) provides a 'completely different paradigm' for fielding and improving new equipment.
Page 30

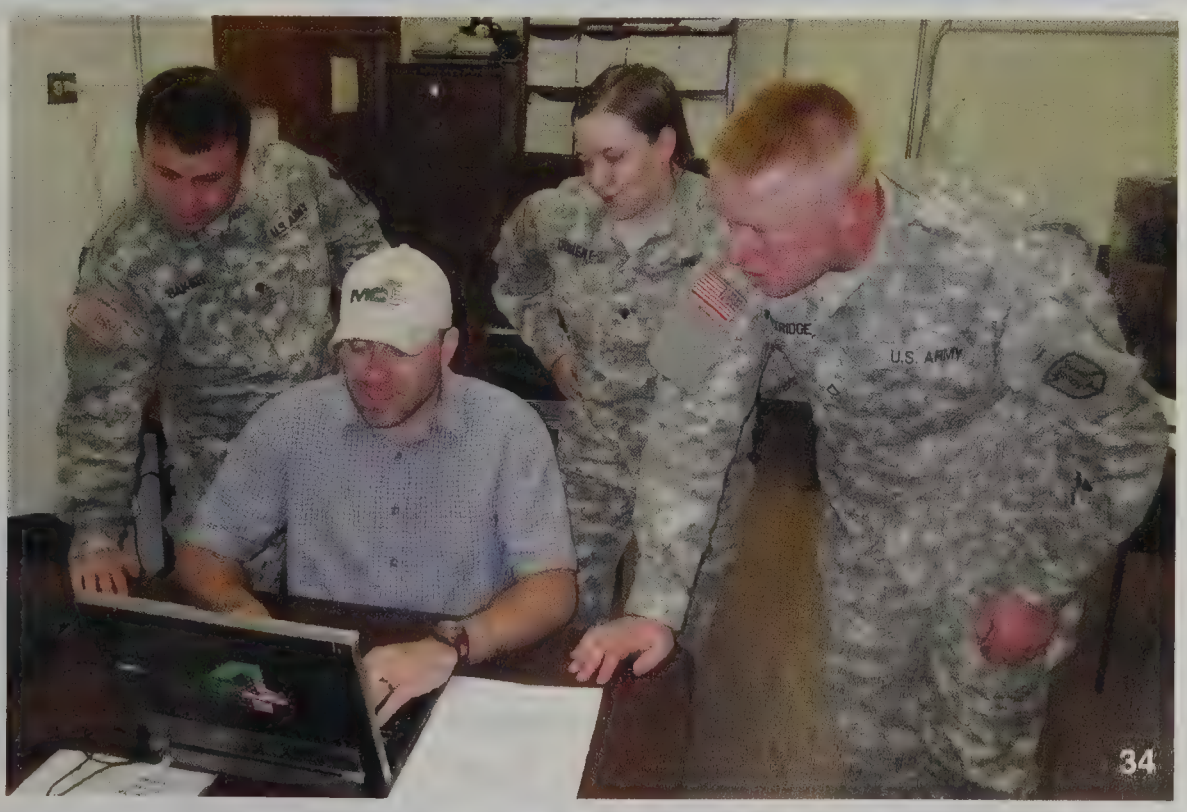
30

FEATURES

The Army National Guard: Where We've Been and Where We Want to Go
By LTG William E. Ingram Jr.

'Over the last 10 years America has made a huge investment in blood, sweat and treasure to elevate the National Guard from a strategic reserve to an operational force.'
Page 25

25


34

Army Veteran Teaches the Art of Medical Recording
By Rachel Collins
Army veteran Falcon Bonsell (seated), who was severely wounded in Afghanistan and fought for benefits because his medical history was incomplete, now teaches caregivers how to use electronic medical recording to create documentation that streamlines medical care for soldiers. ***Page 34***

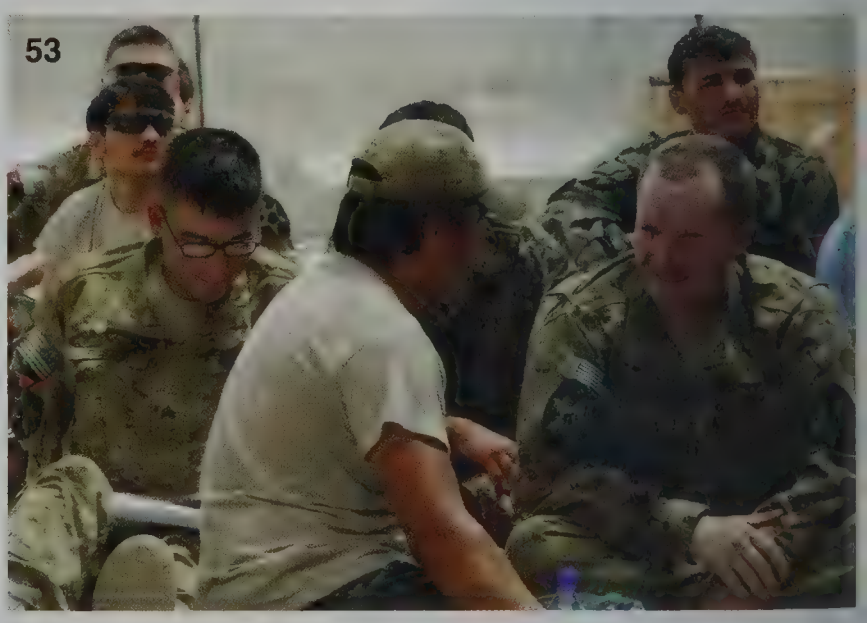
ARMY CONTENTS

Assignment TRADOC: Build the Army of 2020
By COL David J. McCauley and LTC William E. Bohman
As it has for decades, U.S. Army Training and Doctrine Command remains an assignment offering the opportunity to help shape the Army's future in many ways, including training education, leader development, doctrine and force design.
Page 37

The Buck Stops at Fort Leavenworth: Harry S. Truman At the Command and General Staff College
By LTC Eric A. Hollister
During three visits to the Command and General Staff College in the early 1960s, former President Harry S. Truman candidly shared his thoughts on—among other topics—the role of the President, World War II and the Korean Conflict. ***Page 40***

JIEDDO Explores New Robotic Tools for the 'Enduring' IED Threat
By Scott R. Gourley
The Joint Improvised Explosive Device Defeat Organization's competition among robotic systems helps identify new equipment and technologies useful in countering improvised explosive devices. ***Page 49***

Company Command—Building Combat Ready Teams: The Crush of Requirements from Higher Headquarters
Senior commanders offer time-management advice and suggestions for leading effectively in a high-task environment
Page 53



DEPARTMENTS

Letters 5
Advertisers in This Issue 7
Washington Report 8
News Call 9
Sustaining Member Profile 58
Soldier Armed 59
Reviews 61
Historically Speaking 69

BECAUSE IT'S NOT JUST YOUR JOB, IT'S YOUR LIFE.

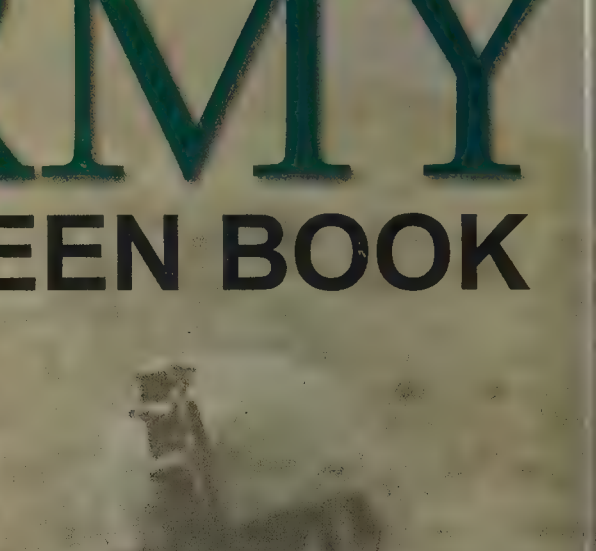
Security is a high stakes operation. FLIR's fixed & mobile security solutions remove inherent risks by integrating cutting-edge sensors and adaptive C2 software designed to work together. When lives are at stake, you need integrated solutions you can trust.

FLIR®

www.FLIR.com/gs

© 2012 FLIR Systems, Inc.

ARMY
2012 GREEN BOOK



Photos Courtesy of U.S. Army

Your best buy in advertising for reaching Army leaders again and again!

The 2012 ARMY Green Book, which is the October issue of ARMY Magazine, is used by military and government personnel as a yearlong reference tool.

Not only will it be sent to Army leaders who are members of AUSA, it will also be distributed at the Association of the U.S. Army (AUSA) Annual Meeting and Exposition in October. Total circulation of the GREEN BOOK is over 100,000.

Advertising Reservations Due
20 August 2012

Advertising Materials Due
3 September 2012

Advertising Department:

Irene Lamar
Jim Burke
230 Park Avenue, Suite 1546
New York, NY 10169
(212) 697-2844
Fax (212) 682-1421
ADVDPT@aol.com

ASSOCIATION OF THE UNITED STATES ARMY

GEN GORDON R. SULLIVAN, USA RET.
President, AUSA

LTG THEODORE G. STROUP JR., USA RET.
Vice President, Education, AUSA

MARY BLAKE FRENCH — *Editor in Chief*
LARRY MOFFI — *Managing Editor*
JOSEPH L. BRODERICK — *Art Director*
DENNIS STEELE — *Senior Staff Writer*
TONI EUGENE — *Associate Editor*
CHRISTOPHER WRIGHT — *Production Artist*
JEREMY DOW — *Assistant Editor*
KATHARINE SCOTT — *Assistant Editor*
THOMAS B. SPINCIC — *Editorial Assistant*

Contributing Editors
GEN FREDERICK J. KROESEN, USA RET.; LTG JAMES M. DUBIK, USA RET.; AND SCOTT R. GOURLEY

LTG THOMAS G. RHAME, USA RET.
Vice President, Finance and Administration, AUSA

JAMES E. BURKE — *Advertising Manager*
MEAGAN B. BAILEY
Advertising Production Manager

NORMAN CAMPBELL — *Fulfillment Director*
VALERIE HOLMAN — *Fulfillment Manager*

ARMY is a professional journal devoted to the advancement of the military arts and sciences and representing the interests of the U.S. Army. Copyright©2012, by the Association of the United States Army. ☐ **ARTICLES** appearing in ARMY do not necessarily reflect the opinion of the officers or members of the Council of Trustees of AUSA, or its editors. Articles are expressions of personal opinion and should not be interpreted as reflecting the official opinion of the Department of Defense nor of any branch, command, installation or agency of the Department of Defense. The magazine assumes no responsibility for any unsolicited material. ☐ **ADVERTISING.** Neither ARMY, nor its publisher, the Association of the United States Army, makes any representations, warranties or endorsements as to the truth and accuracy of the advertisements appearing herein, and no such representations, warranties or endorsements should be implied or inferred from the appearance of the advertisements in the publication. The advertisers are solely responsible for the contents of such advertisements. ☐ **RATES.** Individual memberships and subscriptions payable in advance (one year/three year): $21/$63 for E1-E4, cadets/OCS and GS1-GS4; $26/$71 for E5-E7, GS5-GS6; 31/$85 for E8-E9, O1-O3, W1-W3, GS7-GS11 and veterans; 34/$93 for O4-O6, W4-W5, GS12-GS15 and civilians; 39/$107 for O7-O10, SES and ES; life membership, graduated rates to $525 based on age; $17 a year of all dues is allocated for a subscription to ARMY Magazine; single copies, $3.00. Additional postage to all foreign countries, $15 per year. For other rates, write Fulfillment Manager, Box 101560, Arlington, VA 22210-0860.

ADVERTISING. Information and rates available from the Advertising Production Manager or our advertising representatives, who are:

The Audit Bureau

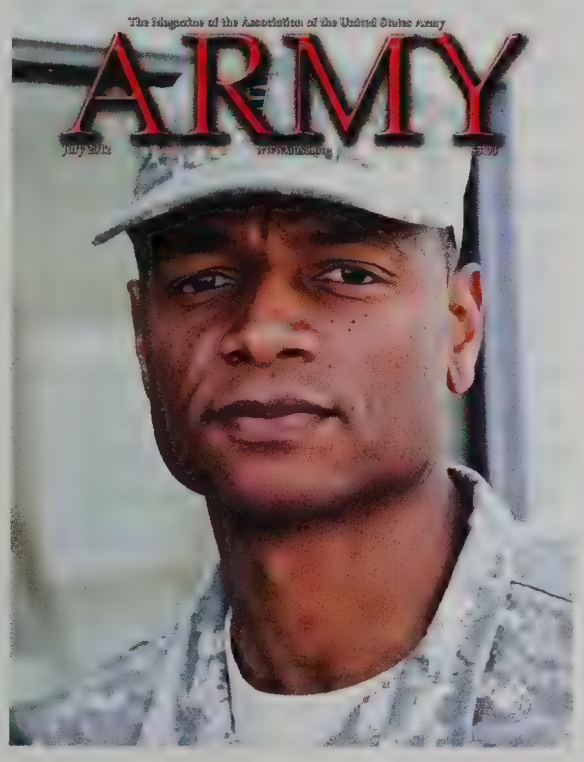
James E. Burke and **Irene Lamar**, 230 Park Ave., Suite 1546, New York, NY 10169. (212) 697-2844. FAX (212) 682-1421. Email: advdpt@aol.com.

ARMY (ISSN 0004-2455), published monthly. Vol. 62, No. 8. Subscription $34 a year. Publication offices: Association of the United States Army, 2425 Wilson Blvd., Arlington, VA 22201-3326, (703) 841-4300, FAX: (703) 841-3505, email: armymag@ausa.org. Visit AUSA's web page on the Internet at www.ausa.org. Periodicals postage paid at Arlington, Va., and at additional mailing office.
POSTMASTER: Send address changes to ARMY Magazine, Box 101560, Arlington, VA 22210-0860.

Letters

Army Warrant Officers

■ I thoroughly enjoyed reading the July issue of ARMY Magazine from the front cover onward. The coverage ARMY provided to Army warrant officers to commemorate the Warrant Officer Corps birthday was exceptional.



Having a senior warrant officer featured on the front cover of the magazine must be a first for ARMY. There was the announcement of CW5 Phyllis Wilson being selected as the command chief warrant officer to the Army Reserve and U.S. Army Reserve Command. Finally, the article "Still a Work in Progress" captured the changes made within today's warrant officer cohort as we maintain our technical relevance while serving in direct leadership roles throughout the force.

Only the untimely death of CW5 John C. Pratt in Afghanistan, listed in "Army Casualties in Afghanistan," marred the coverage.

CW5 ROBERT L. HUFFMAN, USA RET
Clarksville, Tenn.

Army Professionalism

■ LTG James M. Dubik's June article, "Education, Experience and Training: Responsibilities to the Army as a Profession," does a superb job of placing the professional implications of budget cuts in perspective.

Of the three pillars of Army professionalism, education has been on the back burner—whether for commissioned or enlisted leaders—since the decade of the 1990s due to a post-Cold War "peace dividend" and then continued into the next decade as a consequence of wartime deployment overload.

What LTG Dubik does not mention is that for the junior NCO (staff sergeant and below), the educational norm has been a high school diploma with the development of applied intellect primarily through old-fashioned, trial-and-error experiential learning, self-development (on personal time) and the selective emulation of highly experienced superiors.

Though duties and responsibilities are of a different scope and magni-

This Month's Cover

Colorado Army National Guard SGT Sheldon Snodgrass, a flight instructor with Company G, 2nd Battalion, 135th Aviation Regiment, leans from the door of a UH-60 Black Hawk helicopter to check a section of the High Park wildfire in Larimer County, Colo., during a June structure protection mission. Colorado Guard soldiers were joined by Guard units from Wyoming, Nebraska and Kansas to fight the High Park blaze. At the same time, Guard soldiers also assisted civilian firefighters and law enforcement agencies in the battle against the Waldo Canyon wildfire in central Colorado near Colorado Springs. Meanwhile, New Mexico Guard soldiers helped fight the Little Bear wildfire near Ruidoso, N.M., and Wyoming Guard troops were helping to fight a wildfire in their home state.
(Cover photograph by U.S. Army SGT Ryan Kohlman.)

tude for every soldier, junior NCOs across the spectrum of land operations confront the same mission variables, indigenous contingencies and operational parameters as do their superiors. In fact, the NCO's relatively closer proximity to the kinetics of events serves to generate more situationally induced and self-determined functions than in the case of a commissioned officer. Among such assumed functions are ambassador, arbitrator, magistrate, social engineer, civil affairs counselor and humanitarian, particularly when a vacuum exists in indigenous social and government institutions. Such ad hoc services have been a historic trademark of the American soldier.

One lesson learned from the unconventional warfare that resulted from the catastrophic events of 9/11 is that the enlisted leaders of small units have had to make time-sensitive, situationally induced, asymmetric decisions historically reserved for lieutenants and captains, if not a higher authority. A high school education does not, nor is it intended to, develop the intellectual depth, breadth, precision, resilience and stamina needed to efficiently function in operational environments where asymmetric discretionary actions are pivotal to mission success.

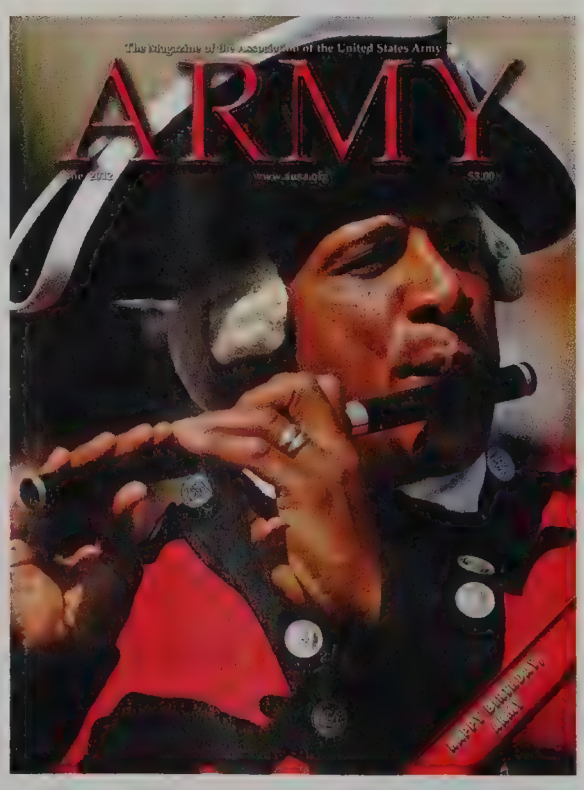
The loss of brain power due to undeveloped and underdeveloped potential in the junior enlisted leader ranks has been huge. Isn't it time to place priority on up-front, postsecondary educational development before deployment to a combat zone as a professional obligation for those in the bottom echelons of leadership?

ANDREW S. KORIM
Sarver, Pa.

ARMY Magazine welcomes letters to the editor. Short letters are more likely to be published, and all letters may be edited. Please send letters to The Editor, ARMY Magazine, AUSA, 2425 Wilson Blvd., Arlington, VA 22201. Letters may also be faxed to (703) 841-3505 or sent via email to armymag@ausa.org.

Army Birthday

■ The June ARMY cover photo was indeed a great choice to celebrate the Army birthday, but you did not identify the soldier: SFC Donald P. Francisco, a member of the Fife and Drum Corps (FDC), 3rd U.S. Infantry Regiment. He has served in the regiment since 1991 and epitomizes professionalism and Army values. He is also an incredible musician, which is the unit standard for the always brilliant FDC. Some of your readers who run the annual Army Ten-Miler will recognize him as the soldier who plays his flute throughout the course of the race. (My husband—COL David P. Anders—and I are so very proud to be associated with SFC Francisco, the FDC and all soldiers of The Old Guard.)



JACKIE ANDERS
Joint Base Myer-Henderson Hall, Va.

LTG Julius W. Becton Jr., USA Ret.

■ I look forward to your book reviews each month. They usually result in my adding yet another volume to my growing must-read list. LTG Julius W. Becton Jr.'s review of *Freedom Flyers: The Tuskegee Airmen of World War II* in the May issue of ARMY, however, struck an entirely different chord.

I had the privilege of working with and for then-LTC Becton at Fort Campbell, Ky., and in Vietnam in the 1967-68 time frame. His retelling of the Tuskegee Airmen story is personalized with his own detailed experience as a victim of discrimination who rose to the top in both the military and later in a distinguished civilian career of service and dedication. Then-LTC Becton was an inspiration to generations of young officers, some of whom, like me, had grown up in a cruel, segregated South (although those injustices were not found only below the Mason-Dixon Line). He exuded professionalism, pride and dedication, which compelled an entire generation of young soldiers in the 101st Airborne Division (Screaming Eagles) to do extraordinary things.

At the time I did not know of his personal dealings with racial issues, and I did not really care because it never affected the leadership he displayed or his fairness and dedication to our mission in Vietnam.

In the late 1970s, I again had the honor of meeting with him briefly in Germany at VII Corps Headquarters as he was nearing the end of a remarkable military career. Despite this, he never retired, taking on the challenges of putting the Federal Emer-

gency Management Agency on a path to relevance and later serving as head of the Washington, D.C., school system, which needed his vision and determination to serve our young people better and perhaps save their lives.

I know that AUSA has honored LTG Becton with the Marshall Medal. It is time that all of us who served with or know the deeds of this great patriot and embodiment of the American dream, ensure that his legacy continues to be remembered. How about the Presidential Medal of Freedom?

BG Walt Busbee, USA Ret.
Wilmington, N.C.

'Our Honored Dead, Overseas'

■ BG John S. Brown, U.S. Army retired, does an outstanding job of telling the story of America's overseas military cemeteries in his May "Historically Speaking." After each war—given the choice—approximately 60 percent of the next of kin of our war dead chose to repatriate the remains of their loved ones home for private burial and about 40 percent chose to leave the remains in our beautiful overseas cemeteries. BG Brown, however, doesn't tell the story of the hundreds of American war dead who are buried overseas outside of our cemeteries.

These isolated burials occurred for several reasons: The next of kin elected to leave the remains where they fell and assumed responsibility to care for the diverse and isolated sites; the families were recent immigrants to the United States and chose to repatriate the remains to their original homeland; or the young American joined a foreign service before America's entry into the war and is buried in a Commonwealth War Grave or other foreign military cemetery. Today there are hundreds of fallen Americans buried in locations overseas, but not in our cemeteries.

BG Brown also mentions America's overseas monuments, built and maintained by the American Battle Monuments Commission. Indeed, the commission was originally established in 1923 not to run the cemeteries but to design and construct monuments. Their 14 independent memorials are indeed breathtaking, but they are complemented by hundreds of private memorial sites—monuments built not by the U.S. government but by units, veterans' groups, families, towns and others. Today, these monument sites keep alive the memory of America's wartime service, achievements and sacrifices.

While American Battle Monument Commission cemeteries and monuments are maintained in pristine condition, isolated burials and private memorials are often less well-maintained. American War Memorials Overseas is a 501 (c)(3) nonprofit corporation that seeks to document, promote and preserve all of these scattered burial sites and monuments. For more information, visit our website at www.uswarmemorials.org or send us an email at info@uswarmemorials.org.

Lillian Pfluke
Founder and Executive Director
American War Memorials Overseas

'Toxic Leadership'

■ In the June article, "Toxic Leadership: What Are We Talking About?" LTG Walter F. Ulmer Jr., U.S. Army retired, properly challenges Army leaders to identify and separate destructive leaders. The onus rests on their superiors to act decisively, but we all share responsibility to expose these tyrants. The problem, however, is not confined to the senior ranks of those wearing Army combat uniforms but includes active and reserve component soldiers and Army civilians in leadership positions at all levels.

In 2006, Secretary of Defense Donald H. Rumsfeld implemented a personnel system that was designed in part to facilitate the timely removal of substandard DoD civilians. The National Security Personnel System (NSPS), however, was unpopular, unwieldy and did not survive contact with the entrenched federal bureaucracy and unions. Most affected Army civilians then reverted to the Total Army Personnel Evaluation System (TAPES) between 2009 and 2012. Like NSPS, TAPES can help set conditions to remove abusive and low-performing civilians in leadership positions, but their superiors must be engaged, seek 360-degree input, confront the problem in a timely manner, encourage and monitor change, document the process, and, when warranted, remove those who fail to respond. That's called leadership.

Unlike soldiers who usually move every few years, caustic civilians also pose a potential long-term danger to organizational effectiveness and the retention of high-quality people. They further exacerbate the problem when allowed to remain entrenched and unchallenged for extended periods of time, especially when their uniformed superiors are senior officers with short assignment periods.

As LTG Ulmer states: "While all toxic officers are ultimately poor leaders, not all poor leaders are toxic." It is critical that we identify and confront the former across the total force. They should be afforded the opportunity to change, but when we collectively fail to act, these autocrats are allowed to inflict further damage by stifling initiative, thwarting retention and limiting the promotion of deserving talent—all of which ultimately and negatively affect mission accomplishment.

Stuart G. McLennan III
Fort Hood, Texas

ADVERTISERS IN THIS ISSUE

ARMY Green Book	4
AUSA Annual Meeting	18, 62, 63
AUSA Membership	17
Bankers Advertising Company	22
Exelis Visual Information Solutions	15
FLIR Systems, Inc.	3
General Dynamics C4 Systems	29
Harris RF	Cover IV
ITT Exelis Electronic Systems	13
Kipper Tool	23
Navy Federal Credit Union	11
Oshkosh Defense	Cover II
Pelican Products, Inc.	Cover III
Space and Missile Defense Conference	6
SureFire, LLC	45

ADVERTISING. Information and rates available from the Advertising Production Manager or our advertising representatives:

The Audit Bureau

James E. Burke and **Irene Lamar**, 230 Park Ave., Suite 1546, New York, NY 10169. (212) 697-2844. FAX (212) 682-1421. Email: advdpt@aol.com.

Washington Report

DoD Recommends Equitable Combat Pay Rates

With congressional approval, combat pay could become more equitable, with rates determined by the degree of risk to which servicemembers are exposed.

In late June, the 11th Quadrennial Review of Military Compensation (QRMC) recommended that combat pay be restructured so that servicemembers "who are exposed to the greatest danger receive the highest pay, regardless of grade." The review is preliminary, and any changes must be approved by Congress.

Although regular military compensation for enlisted personnel and officers compares favorably with civilian pay for people with comparable education and experience, servicemembers most likely to be exposed to the hazards of combat currently receive the smallest benefit.

Two types of combat pay are currently available, and each awards troops $225 per month. Those serving in combat zones receive "imminent danger" pay; those serving in an area where they could be exposed to enemy fire receive "hostile fire" pay. The QRMC recommends making hostile fire pay higher than imminent danger pay, while creating levels of the latter that award more money based on increased risk.

Among its recommendations, the QRMC also favors converting the current combat-zone tax exclusion, which shields military compensation from federal taxes up to the highest level of monthly enlisted pay while a servicemember is deployed to a combat zone, into a refundable tax credit. Unlike officers, who currently reap more benefits from the combat tax exclusion, enlisted personnel would benefit more from a refundable tax credit that might not only eliminate their tax bill but even provide a refund after taxes are filed.

The review also addressed recruiting incentives for specialized skills and pay rates and benefits for members of the reserve components.

VHA Recruiting. The Veterans Health Administration (VHA) announced in June that it has begun an aggressive recruitment campaign to hire mental-health professionals, with a team of 21 health-care recruiters—all of them veterans—working to fill mission-critical clinical and executive positions across the country. The initiative is in response to an April Department of Veterans Affairs decision to increase its national mental health-care force by some 1,600 mental health clinicians and nearly 300 support staff in an attempt to cut veterans' wait times for care.

The recruiting team is focusing its efforts on rural and highly rural areas, where it has been difficult to find staff, and it is targeting physicians and specialty health-care occupations. VHA anticipates that most of the new employees will be on staff by the end of this year.

For more information or to apply for jobs online, visit www.vacareers.va.gov.

Enlistment Priority Update. In late June, DoD updated the enlistment priority for eligible students with diplomas from home schools, virtual/distance learning and adult/alternative schools who score 50 or above on the Armed Forces Qualification Test (AFQT). Those students, many of whom previously received Tier 2 enlistment priority, will receive Tier 1 enlistment priority as mandated in the 2012 National Defense Authorization Act.

The education credential policy is used to predict adaptability to the military and successful completion of military service. Tier 1 graduates are more likely to complete their first term of enlistment, so DoD benchmarks require that at least 90 percent of recruits have a Tier 1 credential.

The type or source of education credential is not the only predictor of first-term attrition; aptitude, as measured by the AFQT, is also a determinant. Students with diplomas from home schools, virtual/distance learning and adult/alternative schools who score above 50 on the AFQT have attrition rates similar to those of traditional high school graduates.

Regardless of education credential type, all applicants for military service must meet aptitude, medical and conduct standards, among others.

New SAPRO Director. The Department of Defense has named U.S. Army MG Gary S. Patton the new director of the DoD Sexual Assault Prevention and Response Office (SAPRO). MG Patton, whose most recent assignment was as principal director of the Office of Military Personnel and Policy, assumed his new post in July. He was competitively selected for the SAPRO directorship, succeeding Air Force Maj. Gen. Mary Kay Hertog. MG Patton has served in the Army 33 years and is a veteran of multiple combat tours in Iraq and Afghanistan.

MG Patton's appointment to SAPRO is concurrent with recent DoD initiatives to reduce sexual assault throughout the military. One new policy requires that sexual assault complaints now be handled by senior officers instead of lower-ranking officers. Another is retaining Reserve and National Guard servicemembers on active duty to keep their cases current.

For more information visit www.sapr.mil.

News Call

Pakistan Opens Supply Routes to Afghanistan

After seven months of blocking NATO supply routes into Afghanistan, the Pakistani government allowed NATO supply vehicles to cross its border from the town of Chaman into Afghanistan in July.

Pakistan had closed its borders to NATO last November following an incident in which two dozen Pakistani servicemembers were mistakenly killed by coalition forces.

The agreement was reached when U.S. Secretary of State Hillary Clinton apologized on behalf of the United States for the incident, which was attributed to "friendly fire." In addition, Pakistan has agreed not to impose an increase in the tariff it charges per truck.

Reuters news service reported that the "closure forced NATO countries to bring supplies into landlocked Afghanistan through an alternate route to the north, a cumbersome process that cost two-and-a-half times as much as shipping them to and then across Pakistan." Equally important, the border opening will allow for faster and less expensive withdrawal of NATO troops as Operation Enduring Freedom winds down in the months ahead.

NATO Limits Airstrikes. In the aftermath of a U.S. airstrike in eastern Afghanistan's Logar province that inadvertently killed 18 civilians, NATO's International Security Assistance Force (ISAF) announced in June that it will no longer use aerial munitions against civilian buildings.

In coordination with Afghan National Security Forces, coalition forces will use other conventional methods against insurgents hiding in civilian dwellings. An ISAF release, however, made clear: "As always, Afghan and coalition forces retain the inherent right to use aerial munitions in self-defense if no other options are available."

Then-commander of ISAF's Joint Forces Command, LTG Curtis M. Scaparrotti, told reporters at the Pentagon in June that the new guidance in Afghanistan "doesn't change the rules of engagement. ... We will not employ aerial-delivered munitions on a civilian dwelling unless, of course, it is the last resort and it is, in fact, to ensure the defense of our soldiers."

Civilian casualties have been a contentious issue since the war in Afghanistan began, and the June killings in Logar prompted a scathing denunciation from Afghan President Hamid Karzai. He released a statement claiming such airstrikes were an "illegitimate use of force" and would end completely.

Deployments. In June, the Department of Defense identified four units to deploy as part of the upcoming rotation of forces operating in Afghanistan. The scheduled rotation includes more than 11,000 personnel.

- 4th Brigade Combat Team, 1st Infantry Division, Fort Riley, Kan. (late spring 2012).
- 3rd Brigade Combat Team, 101st Airborne Division (Air Assault), Fort Campbell, Ky. (late fall 2012).

U.S. Army SPC Bentley Davis of the Farah Provincial Reconstruction Team's security forces speaks with an Afghan girl while providing security during a mission in Farah City, Farah Province.

■ 101st Airborne Division (Air Assault) Combat Aviation Brigade, Fort Campbell (late fall 2012).

■ 3rd Infantry Division Combat Aviation Brigade, Fort Stewart, Ga. (early winter 2012).

ARNG Battles Wildfires. Hundreds of National Guard members from five western states converged on Colorado, New Mexico and Wyoming in June, where lightning-stoked wildfires burned out of control for days.

In northern Colorado near Fort Collins, where an uncontained blaze had already destroyed more than 58,000 acres, the Colorado Army National Guard deployed personnel, and UH-60 Black Hawk helicopters released more than 2,000 gallons of water at a time over the fires.

At the request of local and state officials, soldiers of the 193rd Military Police Battalion helped with evacuations and ran checkpoints to deter looters and sightseers. Kansas and Nebraska National Guard units also sent helicopters and firefighting personnel.

After helping to contain wildfires in Wyoming, that state's National Guard also sent a UH-60 with crew and firefighting equipment to help control the Colorado wildfire. By mid-June, the fire was about 50 percent contained.

In New Mexico, where the largest wildfire in the history of the state ravaged more than 296,000 acres, the National Guard provided UH-60s and more than 200 firefighters. Guard members also performed walking patrols and established traffic control points.

COL Gadson Takes Command. The first double amputee to serve as garrison commander of a major Army installation, COL Gregory D. Gadson, has assumed command of Fort Belvoir, Va.

COL Gadson, who assumed his new position in late June, lost both his legs above the knee and severely injured his right arm in Iraq in 2007 when a vehicle in which he was riding was hit by an improvised explosive device.

Two years later, then-LTC Gadson became one of the first double amputees to be fitted with the most technically advanced mechanical legs, which feature battery-powered knees that enable him to walk with a more natural gait than older devices allow. He asked to stay in the Army rather than take medical retirement and returned to active duty, serving nearly two years as director of the Army Wounded Warrior (AW2) program before taking the reins at Fort Belvoir. As director of the program, COL Gadson reassured the newly wounded on a personal level. His success, he said, is a "testament to the soldiers, leaders and employees for whom I serve and certainly the patience and support of my family."

As of June 1, some 1,000 soldiers in the AW2 program of 11,117 soldiers and veterans have amputation injuries; 69 of them have returned to active duty in the current conflict under the Continue on Active Duty program, and another eight have returned to serve with the Army National Guard.

U.S. Forces in Korea. In June, LTG John D. Johnson, Eighth Army commanding general, and Gen. Lee Hong-ki, commander, Third Republic of Korea Army, signed a memorandum of agreement that will enhance combined operation capabilities and strengthen the allianc between the two armies. The agree ment includes provision for the forma

(continued p. 14

COMMAND SERGEANTS MAJOR CHANGES*

CSM L.P. Lehr from 1st BCT, 1st Cav. Div., Fort Hood, Texas, to NTC and Fort Irwin, Fort Irwin, Calif.

Photographs currently unavailable: **CSM M.D. Barnes** from JB Lewis-McChord, Wash., to USA Security Assistance Spt. Activity-Saudi Arabia; **CSM M.A. Dennis** from Fort Belvoir Community Hospital, Fort Belvoir, Va., to WTC, Alexandria, Va.; **CSM J.C. Green** from USAFMCOM to U.S. Army Financial Management School and Regimental CSM, Fort Jackson, S.C.; **CSM T.A. Guden** from 2nd BCT, 82nd Airborne Div., Fort Bragg, N.C., to USAIS, Fort Benning, Ga.; **CSM K. Sharkey** from NCO Academy, Fort Drum, N.Y., to U.S. Army IMCOM Atlantic Region, JB Langley-Eustis, Va.; **CSM A.J. Smith** from 2nd BCT, 101st Airborne Div., Fort Campbell, Ky., to 101st Airborne Div. (AA), Fort Campbell; **CSM D.O. Turnball** from USARAK, Anchorage, Alaska, to MDW, Washington, D.C.

■ ***BCT**—Brigade Combat Team; **IMCOM**—Installation Management Cmd.; **MDW**—U.S. Army Military District of Washington; **NTC**—National Training Center; **WTC**—Warrior Transition Cmd.; **USA**—U.S. Army; **USAFMCOM**—U.S. Army Financial Management Cmd.; **USAIS**—U.S. Army Infantry School; **USARAK**—U.S. Army Alaska*

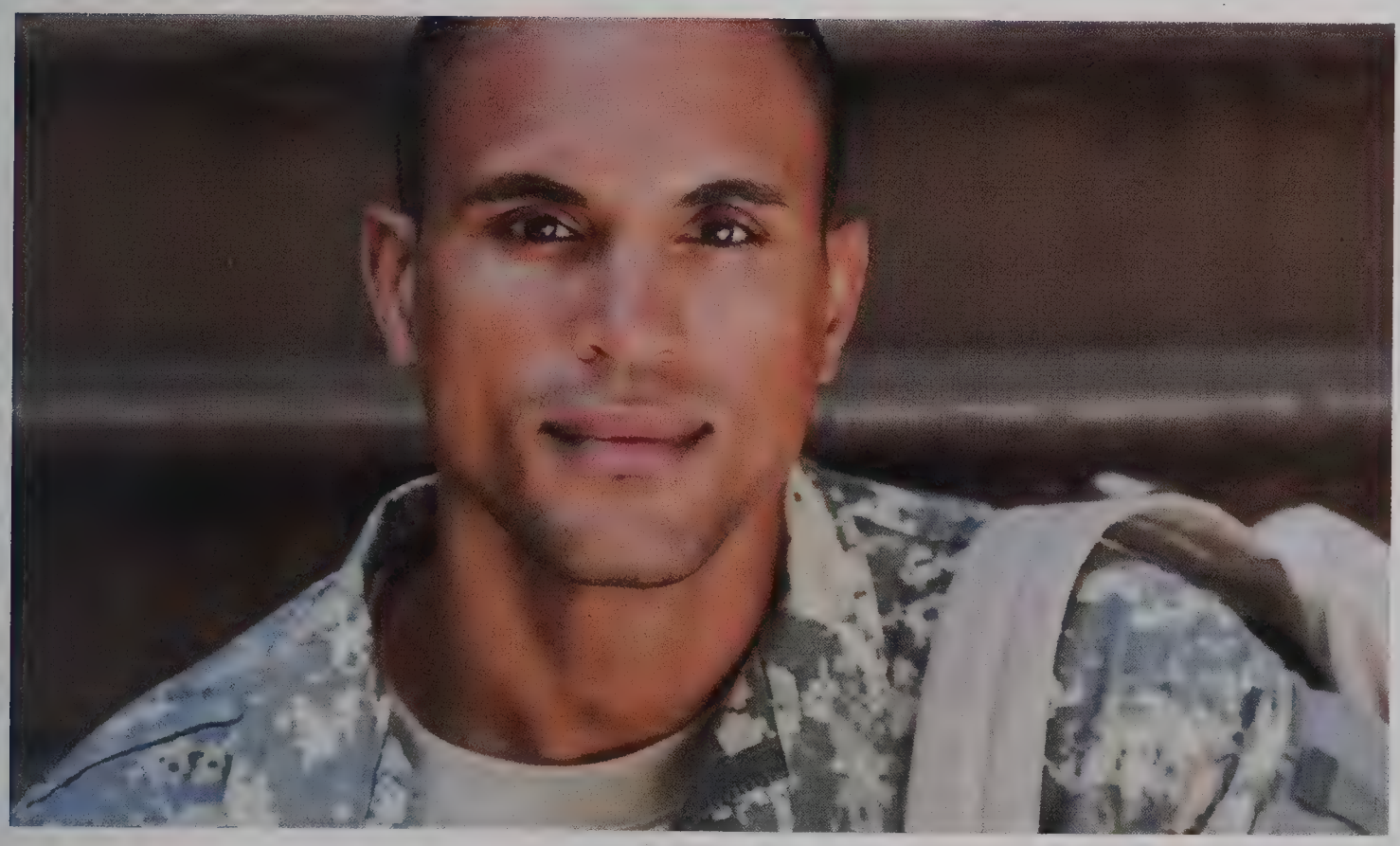
**Command sergeants major positions assigned to general officer commands.*

COL Gregory D. Gadson (right), Fort Belvoir, Va., garrison commander; LTG Michael Ferriter (center) and COL John J. Strycula salute the colors at the change of command ceremony at Fort Belvoir. COL Gadson succeeded COL Strycula.

ARMY READY.

We've been serving the military and their families for over 75 years, which means you're like family to us. When you join Navy Federal, not only do you join our unique community, but you get access to first-rate products designed to benefit the servicemember.

- Free Active Duty Checking®[1] with no monthly service fees and up to $20 in ATM fee rebates[2]
- Over 55,000 free ATMs nationwide
- Free Mobile Banking[3]
- Free Web Bill Pay



NAVY FEDERAL Credit Union®

ARMY
MARINE CORPS
NAVY
AIR FORCE
DoD

WITH US, YOU'RE BANKING WHERE YOU BELONG.

navyfederal.org 1.888.842.6328

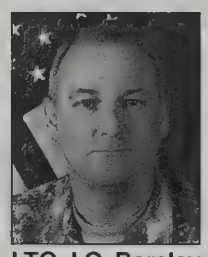
Federally insured by NCUA. [1]To qualify for this account, member must be active duty, retired, or reserve military and must sign up for an Active Duty Checking account with Direct Deposit ($500 minimum) within 90 days of account opening. [2]$20 ATM fee rebates only available with Active Duty Checking. Rebates available at ATMs in the Visa/PLUS® System Network. [3]Message and data rates may apply. App Store℠ is a service mark of Apple, Inc. Android™ is a trademark of Google, Inc. Image used for representational purposes only; does not imply government endorsement. © 2012 Navy Federal NFCU 11076-AUG (6-12)

Available on the App Store

ANDROID APP ON Google play

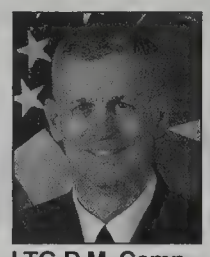
GENERAL OFFICER CHANGES*

GEN F.J. Grass, ARNG, from Dep. Cmdr., USNORTHCOM/Vice Cmdr., U.S. Element, NORAD, Peterson AFB, Colo., to Chief, NGB, Washington, D.C.



LTG J.O. Barclay III from Asst. DCS, G-3/5/7, USA, Washington, D.C., to DCS, G-8, USA, Washington, D.C.

LTG H.B. Bromberg from Dep. CG/CoS, FORSCOM, Fort Bragg, N.C., to DCS, G-1, USA, Washington, D.C.



LTG D.M. Campbell Jr. from CG, III Corps and Fort Hood, Fort Hood, Texas, to CG, USAREUR and Seventh Army, Germany.

LTG W.B. Garrett III from CoS, USF-I, OND, Iraq, to Dep. CG/CoS, FORSCOM, Fort Bragg, N.C.

LTG J.L. Huggins Jr. from CG, 82nd Airborne Div./Cmdr., RC-S, ISAF, NATO, Afghanistan, to DCS, G-3/5/7, USA, Washington, D.C.

MG L.W. Brock III, USAR, from Dep. CG, 335th SC(T), East Point, Ga., to CG, 335th SC(T), East Point

MG L.J. Carroll, USAR, from Cmdr., 4th ESC, San Antonio, Texas, to Dep. CoS, FORSCOM, Fort Bragg, N.C.

MG R.G. Catalanotti, USAR, from Program Manager-Facilities Security Forces, USCENTCOM, Riyadh, Saudi Arabia, to Dir., Exercises and Trng. Directorate J-7, USCENTCOM, MacDill AFB, Fla.

MG P.J. Donahue II from Dep. CoS, TRADOC, JB Langley-Eustis, Va., to CG, USARAF/SETAF, Italy.

MG A.R. Lynn from CG, SCoE and Fort Gordon, Fort Gordon, Ga., to CG, NETCOM, Fort Huachuca, Ariz.

MG M.J. MacCarley, USAR, from Dep. CG, First Army, Rock Island, Ill., to Dep. CoS, TRADOC, JB Langley-Eustis, Va.

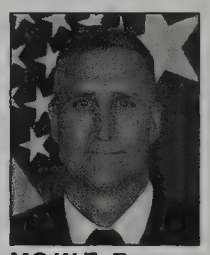
MG J.L. Napper from CG, NETCOM, Fort Huachuca, Ariz., to Dir. of Plans and Policy, J-5, USCYBERCOM, Fort Meade, Md.

MG J.W. Nicholson Jr. from Dep Dir., JIEDDO, Arlington, Va., to CG, 82nd Airborne Div., Fort Bragg, N.C.

MG L.V. Patterson from CG, 7th SC(T), Fort Gordon, Ga., to CG, SCoE and Fort Gordon.

MG G.S. Patton from Principal Director, MPP, ODASD (MPP), OUSD (P&R), Washington, D.C., to Dir., SAPRO, DHRA, OUSD (P&R), Washington, D.C.

MG W.E. Phipps Jr. from Dep. Dir. for Regional Ops., J-3, Jt. Staff, Washington, D.C., to Dep. CG, Army North/Fifth USA, Fort Sam Houston, Texas.



MG W.E. Rapp from Dep. CG-Spt., USF-A, OEF, Afghanistan, to Chief, Legislative Liaison, OSA, Washington, D.C.

MG J.G. Rossi from CG, 32nd AAMDC, Fort Bliss, Texas, to Dir., QDR, ODCS, G-8, USA, Washington, D.C.

MG T.C. Seamands from Dep. CoS, G-1, FORSCOM, Fort Bragg, N.C., to Dir., Military Personnel Mgmt., ODCS, G-1, USA, Washington, D.C.

MG R.A. Thomas III from Dep. Cmdr., JSOC, USSOCOM, Fort Bragg, N.C., to Cmdr., SOJTF-A/NATO, SOCC-A, OEF, Afghanistan.

MG J.V. Young Jr., USAR, from Dep. Chief, USAR, OCAR, Washington, D.C., to CoS, USARC, Fort Bragg, N.C.

Brigadier Generals: **G. Bingham** from Cmdt., QMS, Fort Lee, Va., to CG, WSMR, N.M.; **J.A. Brendler** from Chief, C/J-6, ISAF, OEF Afghanistan, to Dir. of Architecture, Ops., Networks and Space, OCIO/G-6, USA, Washington, D.C.; **J.H. Dickinson** from CG, 94th AAMDC, Fort Shafter, Hawaii, to CG, 32nd AAMDC, Fort Bliss, Texas; **J.G. Ferrari** from CG, WSMR, N.M., to Dir., Jt. and Futures, ODCS G-8, USA, Washington, D.C.; **C.A. Flynn** from Spec. Asst. to the CG, FORSCOM, Fort Bragg, N.C., to Dep. CG, 82nd Abn. Div., Fort Bragg; **D.L. Karbler** from Cmdt., ADA School, FCoE, Fort Sill, Okla., to CG, 94th AAMDC, Fort Shafter, Hawaii; **O.A. Knudson** from PEO (M&S), RSA, Ala., to PE, Programs and Integration, MDA, RSA; **J.B. Morrison Jr.** from Dir., LWN/MC, ODCS, G-3/5/7, USA, Washington D.C. to CG, 7th SC(T), Fort Gordon, Ga.; **M.P. Schweitzer** from Dep. CG (Ops.), 82nd Abn. Div./Dep. Cmdr. for Ops., RC-S, ISAF, NATO Afghanistan, to Dep. Dir. for Regional Ops., J-3, Jt. Staff, Washington, D.C.; **W.J. Scott** from CG, 311th TSC, Fort Shafter, Hawaii, to Chief C/J-6, ISAF, OEF; **R.L. Stevens** from CG, USACE, POD, Fort Shafter, Hawaii, to Dir., Jt. Engineering Directorate, USF-A and Cmdr., TAD (F) (A), Afghanistan; **K.J. Thomas** from Asst. CG for Police Development, NTM-A/CSTC-A, to Dep. CoS, G-1, FORSCOM, Fort Bragg N.C.; **E.P. Wendt,** from Dep. Cmdr., RC-N, ISAF, NATO, OEF, to CG, SOCKOR, USFK, Republic of Korea.

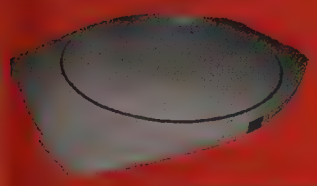
Assignments to general officer slots announced by the General Officer Management Office, Department of the Army. Some officers are listed at the grade to which they are nominated, promotable or eligible to be frocked. The reporting dates for some officers may not yet be determined.

■ ***AAMDC**—Army Air and Missile Defense Cmd.; **ADA**—Air Defense Artillery; **AFB**—Air Force Base; **CoS**—Chief of Staff; **CSTC-A**—Combined Security Transition Cmd.-Afghanistan; **DCS**—Dep. Chief of Staff; **DHRA**—DoD Human Resources Activity; **ESC**—Sustainment Cmd (Expeditionary); **FCoE**—Fires Center of Excellence; **FORSCOM**—U.S. Army Forces Cmd.; **ISAF**—International Security Assistance Force; **JB**—Joint Base; **JIEDDO**—Jt. Improvised Explosive Device Defeat Organization; **JSOC**—Jt. Special Operations Cmd.; **LWN/MC**—Land-WarNet/Mission Cmd.; **MDA**—Missile Defense Agency; **MPP**—Military Personnel Policy; **NATO**—North Atlantic Treaty Organization; **NETCOM**—U.S. Army Network Enterprise Technology Cmd.; **NGB**—National Guard Bureau; **NORAD**—North American Aerospace Defense Cmd.; **NTM-A**—NATO Training Mission-Afghanistan; **OCAR**—Office of the Chief, Army Reserve; **OCIO**—Office of the Chief Information Officer; **ODASD (MPP)**—Office of the Deputy Asst. Sec. of Defense (Military Personnel Policy); **ODCS**—Office of the Deputy Chief of Staff; **OEF**—Operation Enduring Freedom; **OND**—Operation New Dawn; **OSA**—Office of the Secretary of the Army; **OUSD (P&R)**—Office of the Under Secretary of Defense for Personnel and Readiness; **PE**—Program Executive; **PEO (M&S)**—Program Executive Officer (Missiles and Space; **POD**—Pacific Ocean Div.; **QDR**—Quadrennial Defense Review; **QMS**—U.S. Army Quartermaster School; **RC-N**—Regional Cmd.-North; **RC-S**—Regional Cmd.-South; **RSA**—Redstone Arsenal; **SAPRO**—Sexual Assault Prevention and Response Office; **SCoE**—Signal Center of Excellence; **SC(T)**—Signal Cmd. (Theater); **SETAF**—Southern European Task Force; **SOCC-A**—Special Operations Component Cmd.-Afghanistan; **SOCKOR**—Special Operations Cmd. Korea; **SOJTF-A**—Special Operations Jt. Task Force-Afghanistan; **TAD (F)(A)**—Transatlantic Div. (Forward)(Afghanistan); **TRADOC**—U.S. Army Training and Doctrine Cmd.; **TSC**—Theater Signal Cmd.; **USA**—U.S. Army; **USACE**—U.S. Army Corps of Engineers; **USAR**—U.S. Army Reserve; **USARAF**—U.S. Army Africa; **USARC**—U.S. Army Reserve Cmd.; **USAREUR**—U.S. Army Europe; **USCENTCOM**—U.S. Central Cmd.; **USCYBERCOM**—U.S. Cyber Cmd.; **USF-A**—U.S. Forces-Afghanistan; **USF-I**—U.S. Forces-Iraq; **USFK**—U.S. Forces Korea; **USNORTHCOM**—U.S. Northern Cmd.; **USSOCOM**—U.S. Special Operations Cmd.; **WSMR**—White Sands Missile Range.*

EXELIS

THE POWER OF INGENUITY

Remote mission.
Proven broadband.
Cost-effective solution.



In the world of satellite communications, GNOMAD stands apart. Combat-proven by the U.S. Army in Northern Iraq and Kuwait, GNOMAD equips forces with reliable broadband communications by extending Wi-Fi and 3G/4G cellular networks into harsh environments.

Modular by design, GNOMAD delivers affordable networking beyond line-of-sight while on the move. To learn more about GNOMAD's innovative capabilities, visit **www.exelisinc.com/gnomad-dom**

www.exelisinc.com

Exelis and "The Power of Ingenuity" are trademarks of Exelis Inc. ITT is a trademark of ITT Manufacturing Enterprises, LLC and is used under license. Copyright © 2012 Exelis Inc. All rights reserved. Photo courtesy of the U.S. Army and Sgt. Ken Scar

Army Casualties in Afghanistan

The following U.S. Army soldiers were reported killed supporting Operation Enduring Freedom from June 1 to June 30, 2012. All names have been released through the Department of Defense; families have been notified.

SPC Gerardo Campos, 23
PFC Nathan T. Davis, 20
PFC Leroy Deronde III, 22
PFC Vincent J. Ellis, 22
1LT Mathew G. Fazzari, 25
SGT Nicholas C. Fredsti, 30
PFC Brandon D. Goodine, 20
SPC Kedith L. Jacobs, 21
PFC Jarrod A. Lallier, 20
SSG Matthew J. Leach, 29
SGT Joseph M. Lilly, 25
SSG Roberto Loeza, 28
SPC Bryant J. Luxmore, 25
SFC Barett W. McNabb, 33
SPC John D. Meador II, 36
CPT Scott P. Pace, 39
SPC Trevor A. Pinnick, 20
SSG Alexander G. Povilaitis, 47
1LT Stephen C. Prasnicki, 24
1LT Ryan D. Rawl, 30
SGT Jose Rodriguez, 22
SGT James L. Skalberg Jr., 25
SFC Matthew B. Thomas, 30
MAJ Paul C. Voelke, 36

tion of sister-unit relationships as well as combined live-fire training and small-unit training.

Also in June, the 210th Fires Brigade, 2nd Infantry Division, received the Army Superior Unit Award for its actions in response to the November 2010 North Korean artillery attack on the border island of Yeonpyeong in the Yellow Sea on the South Korea side of the maritime border. Specific details of the unit's actions had not been released when ARMY Magazine went to press, but *Stars and Stripes* quoted 2nd Infantry Division spokesman Joe Scrocca as saying the unit "quickly established firing capability, uploaded 100 percent of its prepositioned authorized combat load of multiple launch rocket system ammunition, uploaded missile essential equipment, and deployed counterfire radars and launchers" in support of the Republic of Korea.

MacArthur Awards. In May, Army Chief of Staff GEN Raymond T. Odierno presented General Douglas MacArthur Leadership Awards to 27 company-grade commissioned officers and warrant officers in the three Army components who best demonstrate the ideals of duty, honor and country.

Representing the active Army component: CPT Joseph M. Byerly, CPT Michael P. Kendall, CPT Kristyn M. Kifune, CPT Michael J. Taylor and CPT Joshua M. Trulock of U.S. Army Forces Command; WO1 Anthony Deluzio and CPT Ronald L. Garberson of U.S. Army Special Operations Command; CPT John P. Hintz and CPT Charles L. Mallard Jr. of U.S. Army Training and Doctrine Command; CPT Victor M. Johnson and CPT Bobbi S. Snowden of U.S. Army Medical Command; CPT Thomas W. Burns of U.S. Army Pacific Command; and CPT Craig A. Halstead of U.S. Army Europe.

Representing the Army National Guard (ARNG): CPT Audrey L. Fielding, Ohio ARNG; CPT Nils D. Henderson, Wisconsin ARNG; CPT Anthony J. Ortega, Massachusetts ARNG; CPT Benjamin L. Ruffner, Florida ARNG; CW2 Timmothy A. Smario, North Carolina ARNG; CPT Andrew W. Vidourek, Oregon ARNG; and CPT Charles W. Wimp Jr., Indiana ARNG.

Representing the U.S. Army Reserve: CPT Jessica G. Kingsley and CPT David R. Kogon, Military Intelligence Readiness Command; CPT Shannon Bibbee, 310th Expeditionary Sustainment Command; CPT Christopher J. Henderson, 108th Training Command; CPT John H. Li, 9th Mission Support Command; CW2 Chadwick A. Morris, 316th Expeditionary Sustainment Command; and CPT Patrick W. Naughton, 807th Medical Deployment Support Command.

Korean Combat Memorial. A monument to the U.S. troops and Korean Augmentees killed in active combat on the peninsula since the 1953 armistice was dedicated in June at the Yongsan Garrison, South Korea.

The monument bears the names of those who died as well as an inscription in English and Korean that reads: "The people of the Republic of Korea have built this monument to honor the souls of the fallen soldiers of United

Members of Republic of Korea-U.S. Alliance pause for a moment of silence during a June monument dedication at the Yongsan Garrison.

EXELIS

Visual Information Solutions

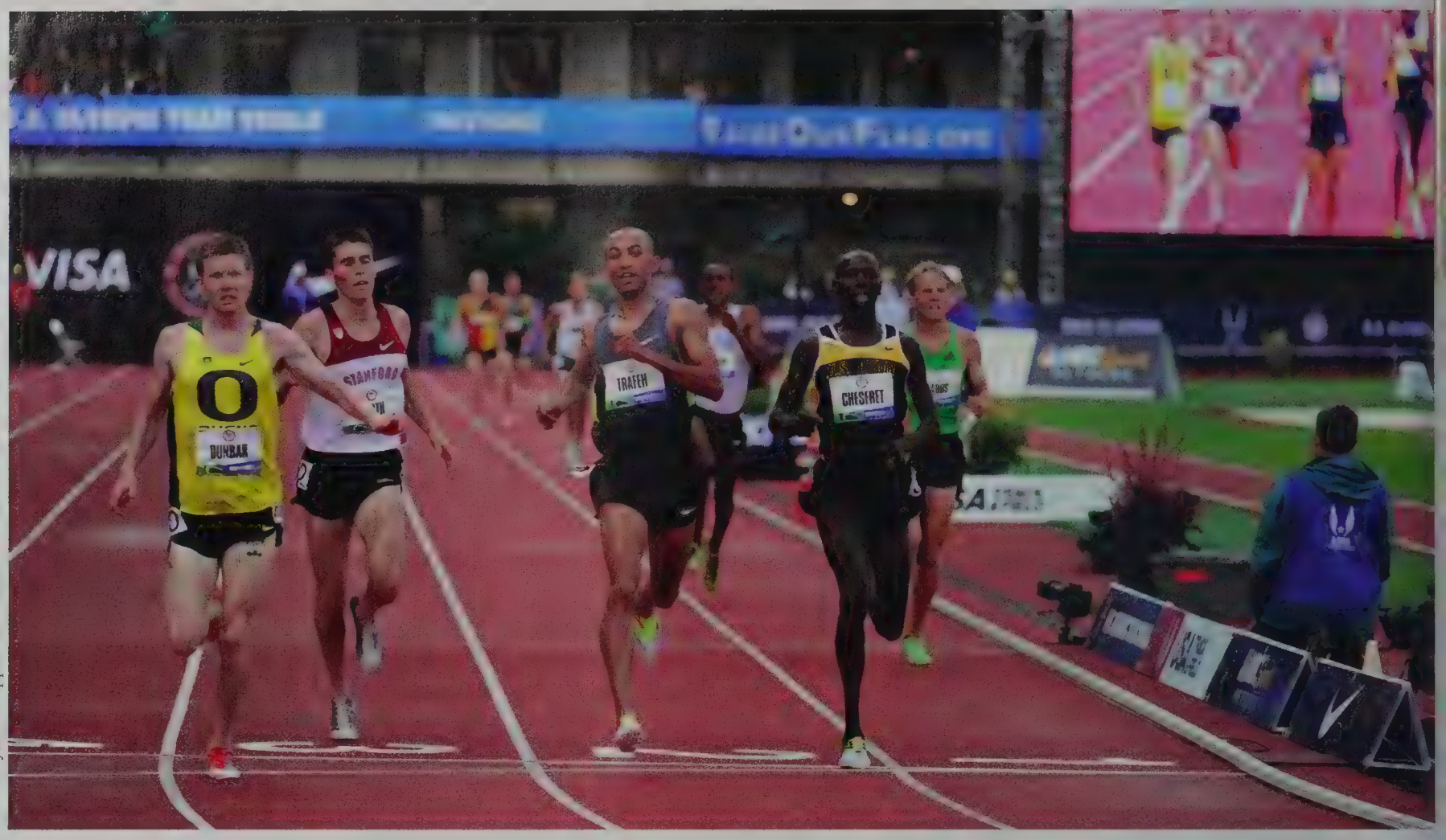
Create Situational Awareness.
Deliver Mission Critical Imagery.
Customize GEOINT Applications.

Exelis Visual Information Solutions provides superior geospatial software solutions to help defense, intelligence and security professionals create important situational awareness. Whether you need to perform hyperspectral image exploitation to reveal camouflaged enemy targets, deliver up-to-date GEOINT to mobile devices for the forward deployed, or create custom tools to support image analysts in theater, Exelis Visual Information Solutions has a solution to support your specific mission needs.

Learn more about our products and services at **www.exelisvis.com**

ENVI | E3De | IAS | Professional Services

All rights reserved. E3De, ENVI and IDL are trademarks of Exelis Inc. All other marks are the property of their respective owners. ©2012 Exelis Visual Information Solutions.



U.S. Army/Tim Hipps

Brother vs. Brother. *At the June U.S. Track and Field Olympic Trials in Eugene, Ore., U.S. Army World Class Athlete SPC Robert Cheseret (right) qualified for the 5,000-meter final, competing for the first time against his older brother, Olympic and World Championship medalist Bernard Lagat.*

States Forces Korea and KATUSAs [Korean Augmentees to the U.S. Army] who died fighting the communists here on the peninsula for the peace and democracy of the Republic of Korea."

Among the names engraved is that of PFC Richard Rimer, who was shot multiple times while standing guard at the Demilitarized Zone in 1962. The most recent casualty was CW2 David Hilemon, whose Kiowa helicopter was shot down in 1994 when it strayed into North Korean airspace.

During the ceremony, GEN James D. Thurman, the commander of U.N. Command/Combined Forces Command/U.S. Forces Korea, said 43 KATUSAs and 92 U.S. servicemembers have been killed in the line of duty in Korea since 1953. He praised the KATUSA program, established during the early days of the Korean War. There are more than 3,300 KATUSAs partnering with U.S. forces today.

Aviation to Lewis-McChord. In late June, the Army announced the planned relocation of two aviation units to Joint Base (JB) Lewis-McChord, Wash. The relocations will be completed by October 15.

First Battalion, 229th Air Cavalry Squadron, will move from Fort Hood, Texas, and convert to an Attack/Reconnaissance Battalion; Company D, 123rd Aviation Regiment, will relocate from Fort Wainwright, Alaska. The force structure relocations will result in a net increase of 531 military personnel for the Army at JB Lewis-McChord, a decrease of 402 military personnel at Fort Hood, and a decrease of 129 at Fort Wainwright.

The relocations are the final phase in the activation of the 16th Combat Aviation Brigade at JB Lewis-McChord to meet the Army's strategic and operational requirements. The units will help meet the increased demand placed on the Army's aviation assets and provide combatant commanders with flexible, trained and highly mobile forces to execute operations worldwide.

Regional Alignment Begins. Beginning in fiscal year (FY) 2013, with the deployment of some 3,000 soldiers to Africa, the Army will begin the regional alignment of forces to a specific combatant commander so that soldiers can gain experience in a specific area while they conduct operations in that theater.

The pilot rotation for the regionally aligned brigade concept will be conducted by U.S. Army Africa, the Army component of U.S. Africa Command (AFRICOM). In late June, DoD announced that the 2nd Brigade Combat Team, 1st Infantry Division would be the brigade regionally aligned with AFRICOM in FY 2013. The command, whose area of responsibility includes more than 50 African countries, has previously lacked assigned forces.

Through the regionally aligned forces concept, each of the six regional combatant commands will be assigned an Army brigade to advise, train and mentor partner-nation forces. The concept allows the Army to meet the needs of combatant commanders, giving them a reliable source of personnel. In turn, the aligned units become experienced in a particular area and its culture; build expertise, knowledge and contacts in a specific area; and then return to it on a rotational basis. ★

AUSA Membership Benefits*

Bank of America, N.A.:
AUSA Bank Card
Start receiving great rewards and show your support for AUSA. Call 866-438-6262.

Institute of Land Warfare:
ILW offers writing programs; conducts conferences and symposia; publishes essays, Defense Reports, newsletters; and provides research on defense issues. Call 800-336-4570, ext. 4630 for details.

AUSA Mastercare Group Insurance Plans:
- Active Duty & Retiree TRICARE Supplement
- Accidental Death and Dismemberment Plan
- 10-Year Level Term Life Insurance Plan
- Group Term Life Insurance Plan
- Short-Term Recovery Plan
- Long Term Care Plan

Call 800-882-5707 for more information.

Dental and Vision Discount Plans:
Discounts offered to AUSA members on dental services and vision exams. Call 800-290-0523.

This plan is not available in the states of MT and VT.

Emergency Assistance Plus:
If you or a family member gets injured or sick while on travel, this plan will provide medical assistance, bring a medical specialist or loved one to your side and much more. Call 888-633-6450 for more information.

Government Vacation Rewards:
AUSA now offers its members discounts on cruises, resorts and tour providers. Call 866-871-9181.

GEICO Insurance – Auto, Home, Condo/Renters, and Boat:
In states where available, a special member discount may apply. Call 800-861-8380.

Apple Member Purchase Program:
Apple Computers offers AUSA members a substantial savings on its computers. Call 800-MY-APPLE and mention you are a member of AUSA.

Book Program:
Members receive discounts on selected military books.

Army Times/Federal Times:
Subscription discounts on Army Times/Federal Times. Call 800-368-5718.

Dell Member Purchase Program:
AUSA members can now receive discounts on Dell PCs. Call 800-695-8133 for more information.

AUSA Career Center:
AUSA members can now post their resumes and employers can advertise any new openings they have. Visit our Web site and go to the Resources drop-down, then Career Center.

University of Maryland University College (UMUC):
University of Maryland University College (UMUC) is pleased to offer undergraduate and graduate study programs to AUSA members worldwide. For some program participants, a discounted tuition rate will apply.

Armed Forces Services Corporation:
AFSC guides you through the details on military entitlements for your retirement and survivor planning/assistance for your spouse. Call or e-mail: 888-237-2872, info@AFSC-USA.com.

Choice Hotels International®:
AUSA members can receive discounts on hotel rooms at the following hotels.

- Comfort Inn®
- Comfort Suites®
- Quality®
- Sleep Inn®
- Clarion®
- Cambria Suites®
- MainStay Suites®
- Suburban Extended Stay Hotel®
- Econo Lodge®
- Rodeway Inn®

Call 800-258-2847 and use the code 00800700.

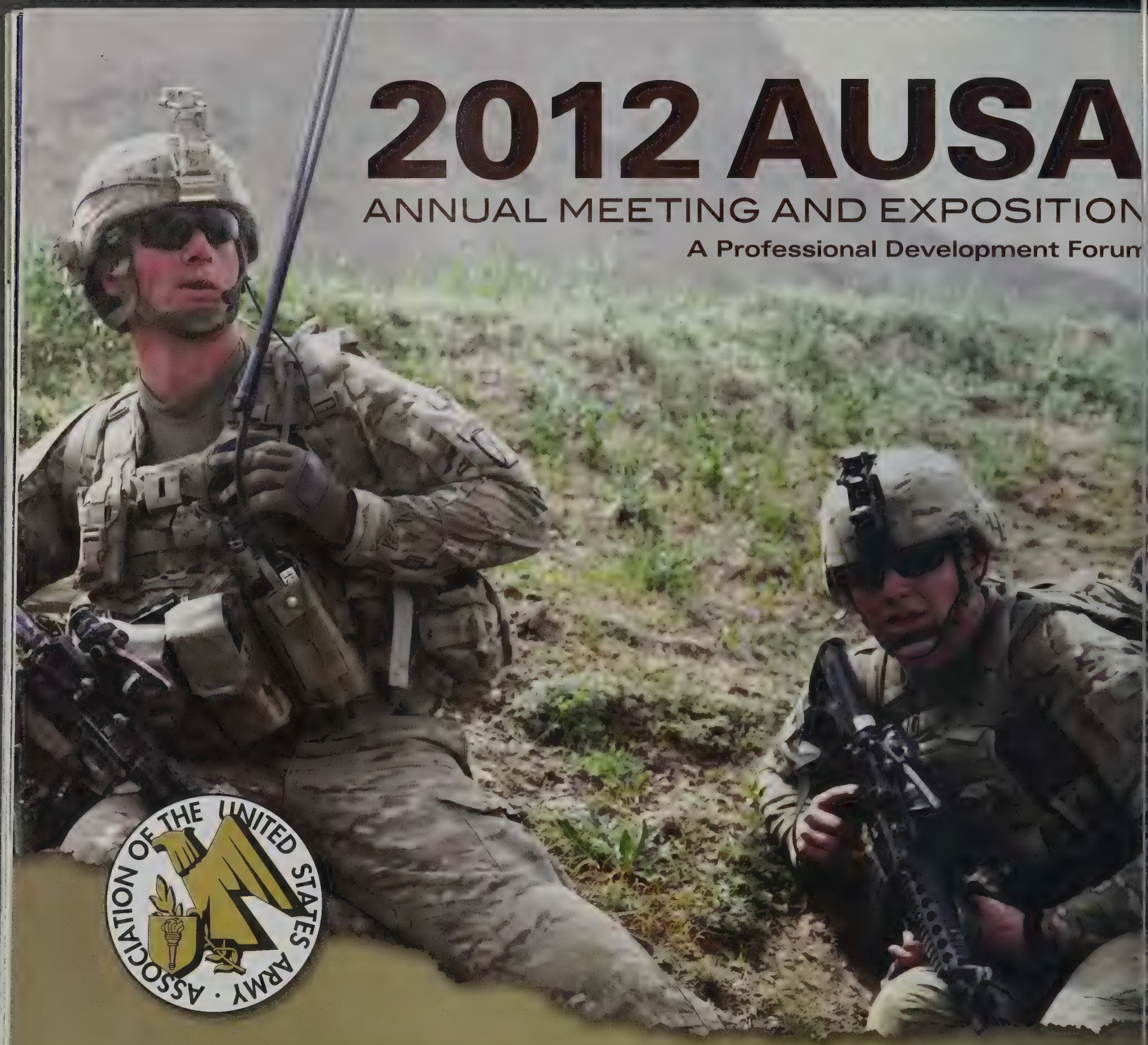
Car Rental Program:
Use the reservation codes on the back of your membership card and save at:

• AVIS	800-331-1441	• Hertz	800-654-6511
• Budget	800-455-2848	• National	800-Car-Rent
• Alamo	800-354-2322 *(rental for under age 25 available)*		

Publications:
- *ARMY* Magazine every month, including the October *ARMY Green Book*.
- *AUSA NEWS* every month.

* **Member discounts and services are subject to change.**

For more detailed information, visit Members Only Benefits and Services at www.ausa.org
or call Member Support at 855-246-6269 / 703-841-4300



2012 AUSA

ANNUAL MEETING AND EXPOSITION

A Professional Development Forum

ASSOCIATION OF THE UNITED STATES ARMY

Why Should You Attend?

- Join over 35,000 people from the world-wide defense community
- Network with key leaders from the Army, DoD, Congress and the defense industry
- View over 700 exhibits featuring the latest technology, products and services
- Participate in panel discussions on the state of the Army and the future of national defense

Don't miss this chance to build relationships and advance your knowledge!

22-24 OCTOBER 2012

Walter E. Washington Convention Center, Washington, DC

www.ausa.org | abrody@ausa.org | 703-907-2665

Thoughts on Strategic Thinking

By GEN Frederick J. Kroesen
U.S. Army retired

This is a time portending major changes in our military establishment and a need for a continuing understanding among the people of the nation of the value of the armed forces to guarantee our freedom and pursuit of our national interests around the world. There is general acceptance and approval that a decade of war has been conducted by forces staffed, equipped, trained and available for deployment that have been, in the main, superb in their role. Military personnel enjoy great respect for the manner in which their missions have been carried out.

This current condition, in order to be sustained in the future, requires a continuing confidence in military leadership, officers and noncommissioned officers who are recognized as intellectually and morally dedicated and capable. They must be educated, experienced in the building, sustaining and managing of our forces, and competent in the art of war when they are employed.

A fundamental contributor to maintaining an Army in this condition has to be the Army school system. After World War I, when resources were reduced to starvation levels, leaders for World War II were shaped and honed by Army schools. Their ability to generate and organize the resources for an unprecedented expansion of the force and then direct its commitments in the vast theaters in which it was employed was a remarkable demonstration of leadership—perhaps unmatched in human history.

That school system was generally reinstated after World War II, educating the leaders who served through the Vietnam and Cold Wars and providing the senior leadership for the Panama and Persian Gulf campaigns, but the system had changed. In 1973 the Army established the Training and Doctrine Command (TRADOC). Given the pressures of a peace dividend on the budget, a new volunteer Army and a refocus on a credible Cold War force that would deter/defeat a Warsaw Pact attack into Western Europe, major changes occurred in the school system. Branch school staffs were halved, course lengths were reduced from 10 to five months, studies of military history were eliminated, and the study and rewriting of doctrine were transferred and centralized at the Command and General Staff College (CGSC). The conduct of operations—the tactics of the operational level of war—became the paramount concern almost to the exclusion of staff procedures and the logistic and administrative functions. The rewriting of Field Manual 100-5, *Operations*, became a full-time occupation for the doctrine writers who were in short order transferred from Fort Leavenworth, Kan., to TRADOC headquarters at Fort Monroe, Va. "How we fight" took precedence over all other functions.

The focus on operations resulted in the suppression of attention and interest in other subjects. The building and management of the Army—now called force development—was neglected for 20 years or so before the Force Management School was activated, where even now the attendance of senior officers is sparse and the principal manual of instruction, *How the Army Runs*, receives little attention beyond the school itself.

How we fight has also affected our relationships with allies. We now send training teams to teach soldiers basic skills, whereas we once deployed military advisory assistance groups and missions to teach them how to build armies. There is a world of difference, but today we do not have people trained to build armies.

Long-term national military strategy to cope with the changing world is not being developed. The threats of mass revolt and counter-culture movements associated with the "Arab spring" are not improving our relations, and the antipathy to our interests by the Taliban, the Muslim Brotherhood, the Iranian leaders, and Islamists in Africa, Yemen and other hotspots deserves military attention. Beyond that, the developing capabilities of China, the still extant Russian doctrine promising the use of low-yield, short-range nuclear weapons on the battlefield, the intransigence of the North Koreans, the continuing Arab-Israeli conflict and now the developing anti-American coalition in Latin America are concerns that demand high-level intellectual military thinking that should be of primary concern throughout our schools.

Attention has been given to this situation. The School for Advanced Military Studies at Fort Leavenworth was initially considering returning to a two-year CGSC course. That and the Strategic Studies Institute and congressional demand for the Quadrennial Defense Review, which deteriorated immediately into a coping-with-budget-limitations exercise, are all ideas for energizing strategic thinking. As yet, however, there has been no restitution of total forces functioning nor strategic thinking regarding the curricula of the Army schools from the branch advance courses through the War Colleges.

I read recently that there really are only two absolute imperatives of our national interest: survival and the preservation of freedom to engage in international action. A long-term plan for ensuring that we have the military forces to satisfy such imperatives is a fit subject for academic inquiry. □

***GEN Frederick J. Kroesen**, USA Ret., formerly served as Vice Chief of Staff of the U.S. Army and commander in chief of U.S. Army Europe. He is a senior fellow of AUSA's Institute of Land Warfare.*

Rethinking the Army's Way Forward

By BG Huba Wass de Czege
U.S. Army retired

While the nature of war has not changed over the 24 centuries of recorded military history, important aspects of warfare are changing constantly. What appears abnormal, innovative, irregular, unconventional or nontraditional in one era could become normal, mundane, regular, conventional or traditional in the next. In fact, some modern enemy states employ all four DoD strategic planning guidance categories of threats—traditional, irregular, disruptive and catastrophic. Those that are not states could combine the last three. In short, we are passing from era to era more rapidly than ever before, and it is important to put the changing aspects into a longer perspective and through the crucible of testing all sound scientific knowledge.

Future 21st-century warfare will not offer an either-or choice but will require a readiness to engage adversaries in both ways simultaneously. It will also require much sharper distinctions in our language and concepts than the ones we now use in our thinking and discourse.

Many defense intellectuals hope that globalization will eliminate bitter political conflict among nation states and that their leaders will be wise enough to avoid crossing the threshold to violent means. A backward glance across the millennia of human social intercourse, however, casts doubt on any such hopes. Unintended consequences, as history teaches, can often lead to undesired war.

History also teaches that hope is a poor deterrent. Being prepared for a world-class challenge, should it materialize, is best. Preparation of two kinds —the physical and the intellectual— is needed. History favors intellectual preparation over the physical. When the challenge looms real, it takes less time to prepare the means when the ways have been well thought out. If the focus of studies becomes only irregular warfare, rather than a more realistic and holistic study of 21st-century warfare, we will never learn more about the interesting new synergies we glimpsed in earlier studies.

The several futuristic Title 10 wargames of the U.S. Army Study Program indicate convincingly that circumstances did not compel state adversaries (whether they are peer competitors, regional powers or small rogue states) into wholly irregular operations. The studies did, however, reveal many innovative ways regular forces could be employed irregularly and the extent to which global conditions and proliferating information technologies encourage a new synergy among regular and irregular forces. While regular forces pose the most difficult and dangerous challenge at the outset of operations, as the campaign progresses, the more persistent challenge becomes the irregulars and the regular force remnants converting to irregular roles. What coalition forces experienced with the paramilitary Fedayeen Saddam will be multiplied many times during the next encounter with a rogue state, and underground insurgent groups will be prepared to exploit the "golden hours" in the immediate wake of regular combat operations. Irregular auxiliary forces have become increasingly useful to both sides.

It is also useful to relearn and rethink systematically what had been learned about 21st-century warfare before the redirection of Army Title 10 wargaming to the counterinsurgency problem. How did we get to the ideas the Army then held, and how do we think ourselves forward?

The end of the Cold War and the collapse of the Soviet Union left the U.S. defense establishment with an Air Force and a Navy that had no peer and no real adversary. Defense planners sought ways to use this superiority in the air and at sea to deal with the crises that arose. A new "American way of war" that promised to coerce enemies with a hail of increasingly precise air and naval missile power while conserving the exposure of soldiers was advanced.

The intellectual leading lights of the concept of the revolution in military affairs (RMA) invented three new mechanisms for winning war. First, network-centric warfare would replace mass armies as a means of killing the enemy. Second, by controlling the commons—space, the oceans and the air above the land people inhabit—and by applying the technologies of the information age, even more precise and more lethal killing could be achieved far from harm's way. Finally, by linking small scattered elements of the force into a high-technology network, any of them could bring very precise, extremely lethal and overwhelming firepower to bear from the commons.

The technical RMA advocates' favorite operational concept for putting these three mechanisms into action was Rapid Decisive Operations (RDO), which was articulated in the language of maneuver warfare—but without understanding its grammar and punctuation. Relying on "smart" weapons, RDO promised the need for fewer forces at less cost and with fewer casualties. According to a U.S. Joint Forces Command white paper, the key idea was that the "United States and its allies asymmetrically assault the adversary from directions and in dimensions against which he has no counter, dictating the terms and tempo of the operation."

The thinkers of the RDO decade included some highly respected defense intellectuals and retired flag-ranked officers of the more technical services. In their arguments, a number of authors set up false dichotomies: that precise violence and enemy-leadership-influencing information operations reduce the requirement for massive ground formations. They also misunderstood the nature of war, not only in the 21st century but also in any era. This scientific approach to warfare could not be

faulted in a world that behaves as a closed, albeit structurally complex, system. In such a world, effect follows cause very reliably, and the logic of the three mechanisms—network-centric warfare, surgical irregular warfare and effects-based operations—makes sense.

As U.S. involvement in the war in Iraq has drawn to a conclusion, many of us are far wiser. In fact, we knew early on in that long war (which was originally intended to be short and decisive) that technological superiority is insufficient to bring war to closure rapidly and decisively. This is because RMA theories, while not entirely wrong, were just incomplete. They did not account for the more messy, subjective, imprecise and unscientific aspects of warfare.

I believe it is clear to most thoughtful observers that America will need a strong Army within a balanced joint establishment not because the future is filled with irregular threats, but because any operational employment of U.S. armed forces is as likely to involve situations that have quickly and unexpectedly evolved beyond tolerable bounds. Assuming that war is a last resort, after options short of force have failed, it is prudent to pursue war along two complementary lines: a combination of strong measures aimed at softening the will of the enemy's top leadership and a campaign to defeat the enemy regime's power to resist any conditions we might want to impose. Air and naval forces augmented with Army support in critical areas can soften the enemy's will to resist in many ways, but only ground forces can remove and constrict an enemy power's ability to resist and submit to the desired order. Yes, destroying military, economic and civil infrastructures such as bridges and power grids can impose pain, but this leaves the enemy with the initiative and with choices of how to respond to that pain, and it makes it difficult to predict whether they will submit, the form of submission or how long it will take. Furthermore, the deterrent value of America's military power is greater when there is no ambiguity about whether its military can impose its will on intolerable situations.

The ideas underlying DoD transformation up to this point have been much more clumsy, crude and "industrial age" than were imagined less than a decade ago. This misconception of the actual impact of rapid technological gains on warfare occurred partly because practical people had no time to dissect definitions, critique half-baked ideas served up on silver platters, or invest sufficiently in the intellectual advancement of the military art and science. While history has demonstrated repeatedly that success is much more dependent on sound concepts than on technical superiority, the U.S. armed forces spend less than one percent of modernization costs on useful creativity, vetting ideas and officer education.

How then do we think ourselves forward more usefully? Try this.

During the industrial age it was possible, and even useful at operational and tactical levels, to think using

GEN Gordon Sullivan Receives Goodpaster Award

AUSA President GEN Gordon R. Sullivan, USA Ret., center, accepts the Marshall Foundation's Andrew J. Goodpaster Award from Lt. Gen. Brent Scowcroft, USAF Ret., left, and John B. Adams Jr., chairman of the foundation's board of trustees.

GEN Gordon R. Sullivan, U.S. Army retired, and President of the Association of the U.S. Army, was awarded the George C. Marshall Foundation's Andrew J. Goodpaster Award at a ceremony in Washington, D.C., in late May.

The award, which honors the life and service of GEN Andrew J. Goodpaster, a longtime trustee and chairman of the Marshall Foundation's board of trustees, was presented to GEN Sullivan for his "distinguished career in the U.S. Army that he concluded as the 32nd Chief of Staff (and a member of the Joint Chiefs of Staff) and for his leadership of AUSA."

GEN Sullivan, who said he had been "overwhelmed and humbled" when notified he was to receive the award, thanked and paid tribute to "those with whom I have served over the span of my life as an American soldier. They made me look better than I was." □

analogies and act according to assumptions that reflected closed mechanical systems, even as these became structurally complex. During the industrial age, the scale of conflicts and the nature of military forces and weapons demanded huge economies of scale, generalized approaches and simplification of the processes, much as those demanded in industry. During the Cold War we fell into the habit of conceptualizing the potential operations of the Soviet air, land and naval forces as if they composed a structurally complex system. (This was a questionable assumption even then.) We transferred this way of thinking to conceptualizing their "clients," such as North Korea and even Saddam Hussein's Iraq during Operations Desert Shield and Desert Storm. Indeed, it seemed as if that was a good model in 1990 and 1991, but by now it has become blatantly apparent that the Taliban, al Qaeda, and the various actors playing significant roles in Afghanistan and Iraq, down to even the lowest tactical levels, do not fit that model.

It is imperative that we change our primary set of assumptions about warfare at the operational and tactical levels. In the information age, economic units are smaller, nimbler, greatly differentiated and adaptable to rapid changes in the environment. Only interactively complex mental models of the economic environment are useful. Nuanced approaches succeed while generalized ones fail. Wars of the 21st century mirror this evolution. Grand formulas such as hybrid warfare, patterned upon even recent historical cases, will not do. The nuances of the next mission will differ enough to require tailor-made conceptions for dealing with them. These will require hard thinking as well as hard fighting.

It may be more useful to have several models for dealing with violent irregulars who are not in alliance with states. For instance, it is important to understand that although what the U.S. Army attempted to do in Iraq and now, still, in Afghanistan have been truly difficult missions performed with great competence and dedication, these will be unlikely models for future ones. This should not be because the country is weary of counterinsurgency but because this model is fraught with risk of failure. It is one thing to accept this risk if another regime-change mission must be undertaken, but if so, then the favored approach should not follow the same track as these.

First, the troop-to-task costs should be fully understood and resolved at the beginning. Second, the political authorities and Army doctrine should acknowledge the difference between being the sovereign authority in a country facing insurgents or warring factions, and being the outside third party only indirectly in control of policy and its execution. This includes acknowledging that good and competent government and other special conditions favored the better outcomes in places such as Malaya and Northern Ireland. It would be instructive to compare regime change models elsewhere: the collapse of the Soviet Union, Panama, Serbia, Haiti, Grenada and so on.

Making clear that dealing with irregular adversaries resulting from regime change is a special category is only the first step toward greater conceptua clarity about this class of problems with irregulars. It would be useful to differ entiate two additional categories o them. For instance, the problem of as sisting allies with their own insurgen cies is also different from the previous case, and from the next: the problem o global or regional violent political ac tors who are direct threats to Ameri cans. Then there is also the case of vio lent criminals whose main motivation is political only so far as it facilitates the profitability of their criminal enterprise Each of these act—and are defeated—by a different logic.

It will be up to the military profession to make educated guesses abou how to deter the world-class problems they can anticipate while also being prepared enough for the inevitable unanticipated missions. When they do this, the missions can be started based on a logic that is good enough for a strong beginning but can be refined for the specific case through a solid design inquiry and further refined by more rapid learning and adapting to succeed in the end.

The crux of the difficulty for military professionals is how to educate themselves and their masters well enough for this crucial guessing. Part of the solution is to be more scientific in building the theories that frame their thinking, and to make their concepts more like scalpels and less like meat cleavers. In the U.S. Army it may be useful to reach back into the grab bag of learning from earlier Title 10 wargaming experience to bring forward ideas for critical reexamination that might have been ahead of their time.

***BG Huba Wass de Czege**, USA Ret., commanded a rifle company in combat and advised a Vietnamese ranger battalion; commanded at all levels through brigade; founded and directed the School of Advanced Military Studies at Fort Leavenworth, Kan.; served on the personal staffs of both the Supreme Allied Commander and the Secretary General at NATO; and retired as the assistant division commander (maneuver) of the Big Red One at Fort Riley, Kan.*

Bankers ADVERTISING
since 1896 COMPANY

PROMOTIONAL PRODUCT SALES

Bankers Advertising, an industry leader since 1896, is seeking an independent sales representative with proven selling skills to local businesses.

Individual must be a self-starter, be self motivated and have the ability to manage their own business with flexible hours. Commission only.

Call 913-894-8489 or 319-354-1020 Ext. 1137

E-mail: bwilder@bankersadvertising.com or shorner@bankersadvertising.com

Website: www.bankersadvertising.com

Reviewing Arguments for and Against AirSea Battle

By Richard Hart Sinnreich

My editor reminded me that June 6 was the 68th anniversary of D-Day, the storied beginning of the 1944 Normandy invasion, which inaugurated the Allied effort to liberate Nazi-occupied Northwest Europe and, together with Russia's concurrent operations, defeat Hitler's Germany.

D-Day cost the Allies more than 10,000 casualties, including some 4,500 fatalities. The total would have been a good deal higher but for one vital circumstance: By the time Allied assault troops clambered into their fragile landing craft, the seas surrounding France's Cotentin Peninsula and the skies above it had been virtually denuded of German warships and aircraft.

By the day of the invasion, the German navy, and especially its U-boats, had been virtually destroyed. Similarly, while America's strategic bombing campaign had, at best, a marginal impact on the German industry against which it nominally was targeted, what it had accomplished, at painful cost, was to eviscerate the German *Luftwaffe* before the first Allied soldier set foot on French soil.

To gauge the crucial importance of those accomplishments, contrast Normandy with the invasion of Guadalcanal two years earlier, which very nearly saw the U.S. landing force isolated and starved into surrender by Japanese air and naval forces, or the assault on Okinawa almost exactly a year after Normandy, which cost Allied forces nearly 400 ships sunk or damaged and more than 700 aircraft lost.

In both cases, failure before the fact to deprive the enemy of the ability to contest the invasions by air and sea endangered not only the supporting air and naval forces but also the landing force itself.

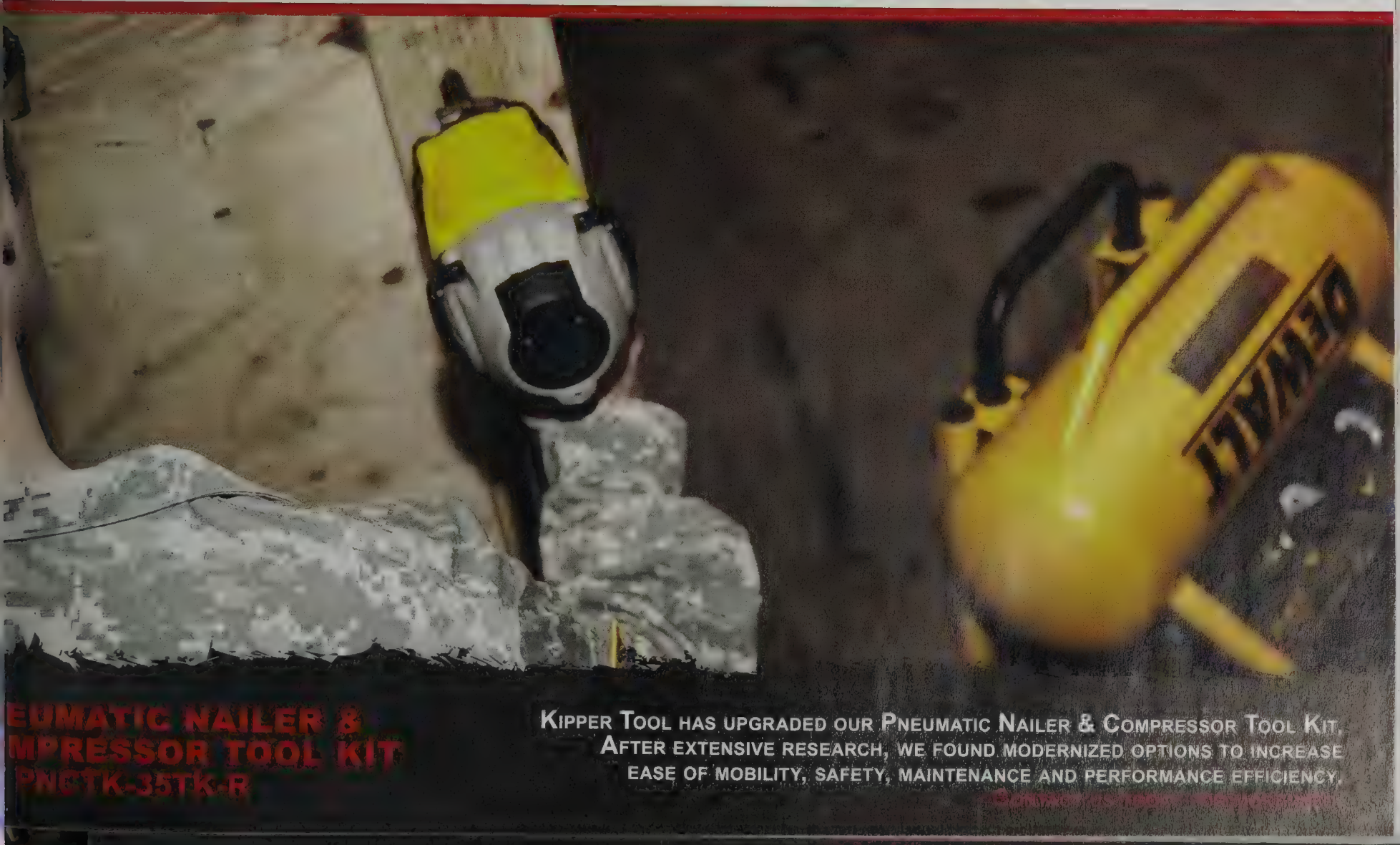
All this bears directly on a continuing debate, especially in Army and Marine Corps circles, concerning the Air Force's and Navy's recently promulgated AirSea Battle (ASB) concept.

For its proponents, ASB—an effort to integrate the two services' reconnaissance and strike capabilities more closely—is essential to defeating proliferating air, missile and naval capabilities that threaten to deny U.S. forces access to the world's littorals and narrow seas, or at least make it much more expensive.

To its skeptics, ASB is a budgetary ploy intended at a time of growing fiscal stringency to advantage Navy and Air Force programs at the expense of Army and Marine Corps ground forces, and thus reverse the resource priorities that have prevailed during the past decade of ground-intensive operations.

KIPPERTOOL®

LIKE US AND STAY INFORMED
800-295-9595
INFO@KIPPERTOOL.COM
KIPPERTOOL.COM



EUMATIC NAILER &
MPRESSOR TOOL KIT
PNCTK-35TK-R

KIPPER TOOL HAS UPGRADED OUR PNEUMATIC NAILER & COMPRESSOR TOOL KIT.
AFTER EXTENSIVE RESEARCH, WE FOUND MODERNIZED OPTIONS TO INCREASE
EASE OF MOBILITY, SAFETY, MAINTENANCE AND PERFORMANCE EFFICIENCY.

Finally, some worry that the frequent association of ASB with the administration's recently announced strategic "pivot to the Pacific" encourages a dangerously self-fulfilling belief in the inevitability of war with China. Complained a former vice chairman of the Joint Chiefs of Staff recently, "AirSea Battle is demonizing China. That's not in anybody's interest."

To that charge, *Aviation Week* editor Bill Sweetman responded that "ASB is not about China. It is intended to counter anti-access/area denial (A2/AD) strategy, tactics and weapons, which are being and will be employed by any nation wanting to throw its weight around in its region. … China is a benchmark, because China is spending more than anyone else on hardware that makes A2/AD possible."

Nor, he adds, is ASB "about cutting the Army and the Marine Corps out of the fight, or (more importantly from some people's viewpoints) out of the budget. Quite the reverse: If the Navy and Air Force can't get into a given area when required, the ground-pounders certainly can't, let alone 'take and hold ground,' with a long, vulnerable logistics chain."

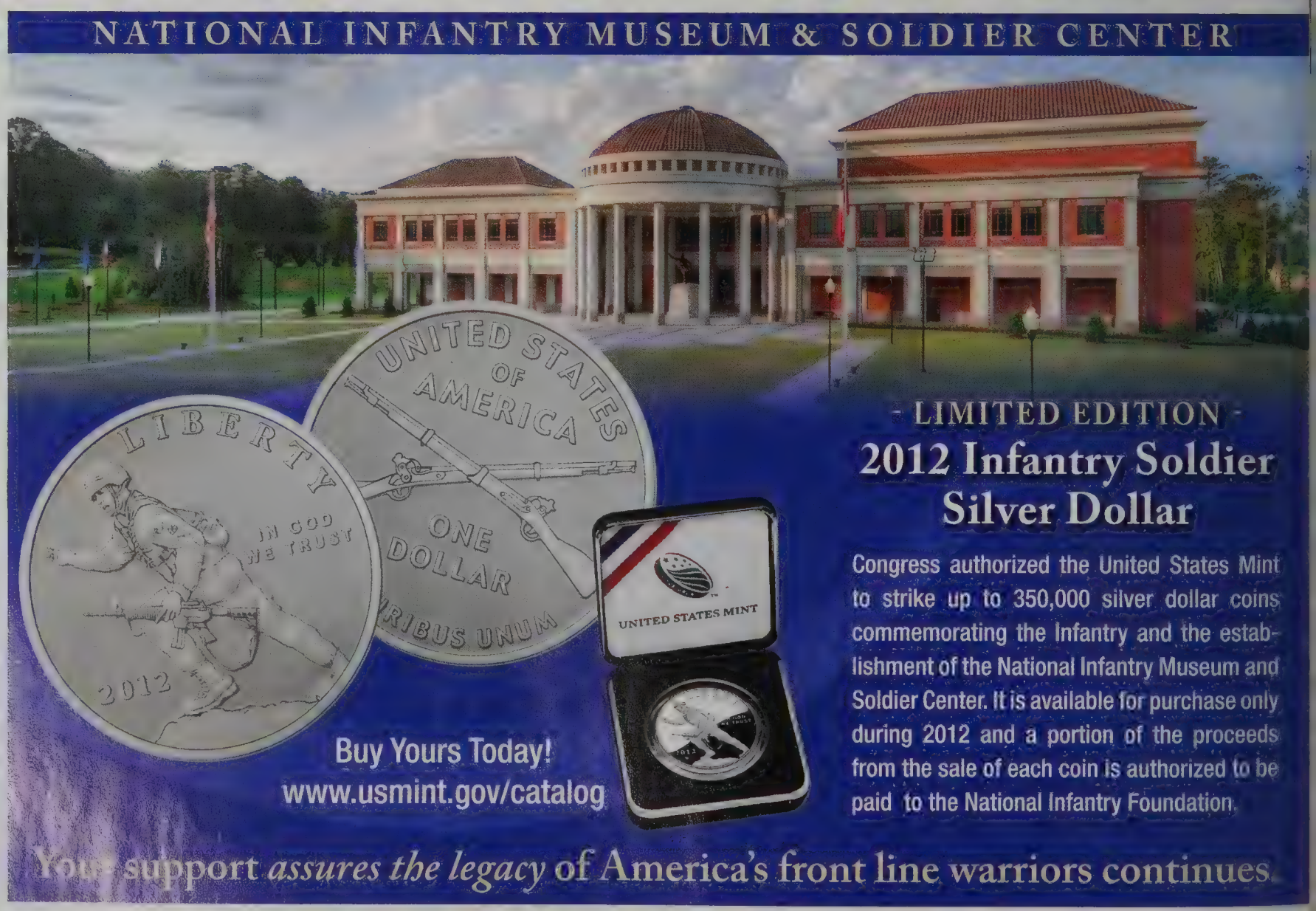
If history is any guide, he's right. Of course, there remains the question of how eager the United States should be to commit military forces in the first place where their presence is opposed by one or more of the contestants, unless in defense of an ally to whom we're committed by solemn treaty. The debates last year over Libya, and today's concerning Syria, have revolved around precisely that question.

But that issue finally is political, not military, and no American should desire to see it resolved by the outright default of the military capability to execute a contested intervention successfully should our elected leaders conclude that U.S. interests require it. And if we must execute such an operation, far better to do so in the condition of relatively unopposed air and sea access that prevailed at Normandy than to find ourselves havin to repay the costs of a Guadalcanal o Okinawa.

What is true for actual commitmen moreover, applies with equal or greate force to deterrence. Those who resis framing China as our inevitable enem —including this columnist— should b wary of any defense program tha seems to be aimed uniquely at that hy pothetical and entirely avoidable trag edy.

But one way to ensure that it re mains hypothetical and avoidable i to discourage any doubt in America' continued ability to project the mili tary power needed to protect our in terests and those of our friends. Tha ASB can contribute to that goal seem a no-brainer.

Richard Hart Sinnreich *writes regu larly about military affairs for* Th Lawton *(Okla.)* Sunday Constitu tion. *This article originally appeared i the June 3, 2012,* Lawton Constitu tion *and is reprinted by permission o the author.*



AND WHERE WE WANT TO GO

By LTG William E. Ingram Jr.

The past 11 years of war have done a great deal to remind America that it has no more capable, reliable and successful resource than its citizen soldiers.

For those who were wearing the uniform on that fateful September morning in 2001, the change in the Army National Guard (ARNG) and Army Reserve (AR) over the last decade has been dramatic. Training, staffing and equipping levels are at or near all-time peaks in efficiency. The derisive term "weekend warrior" has disappeared from the nation's vocabulary. Members of the Guard and Reserve have become accustomed to hearing their active duty brethren say,

During a trip to Camp Arifjan, Kuwait, Army National Guard Director LTG William E. Ingram Jr. presents a National Guard coin of excellence to SGT Ferrell Reynolds of the North Carolina Army National Guard's 1452nd Transportation Company (Heavy Equipment Transport).

"You can't tell the Guardsmen from the regulars" when deployed overseas. Indeed, observers increasingly recognize that the civilian skills citizen soldiers bring to peacekeeping and nation-building missions make them even more capable at these tasks than a regular, full-time soldier can be.

For those having trouble remembering what the Guard and Reserve looked like back in the 1980s and 1990s, it is impossible to appreciate how far they have come or why their leaders today are so committed to making sure there is no return to the "good old days," which weren't really very good at all.

The Not-So-Distant Past

The Army's senior-most leaders are the only ones now left in uniform who can still recall the "hollow Army" of the 1970s. Yet even as the active Army was restored with infusions of new Abrams tanks, Bradley fighting vehicles and Apache helicopters in the 1980s, most ARNG and AR formations were second- and third-tier units with obsolete equipment that had cascaded down to them from the Regular Army. Many ARNG units had different modification tables of organization and equipment from active component units, making it unlikely that they would ever be employed by an organization that didn't understand them.

The Guard was large—more than 450,000 personnel—but units were capped with an authorized level of organization that was well short of wartime strength. Fillers would have to be integrated into units upon mobilization. Training dollars were limited, and commanders often had to choose between sending soldiers to school and having them attend annual training with their unit. The Army's premiere training events were generally unavailable: Participating in a Reforger exercise or a rotation to the National Training Center was a once-in-a-career event for a lucky few. If a war broke out, the Army's mobilization plans called for months or even a year to mobilize and train ARNG combat brigades and divisions. They were an afterthought—a strategic reserve that many thought would be called only in the event of an all-out war with the Soviet Union.

In retrospect, the flaws of organizing the reserve components in this manner are apparent. The Army chose quantity over quality. It chose large numbers of undermanned formations with dated equipment and limited training, knowing that most of these units would not be available quickly if they were needed. To make up for the lack of an operational reserve that could be mobilized quickly, the Army compensated with more active forces than it needed for peacetime operations.

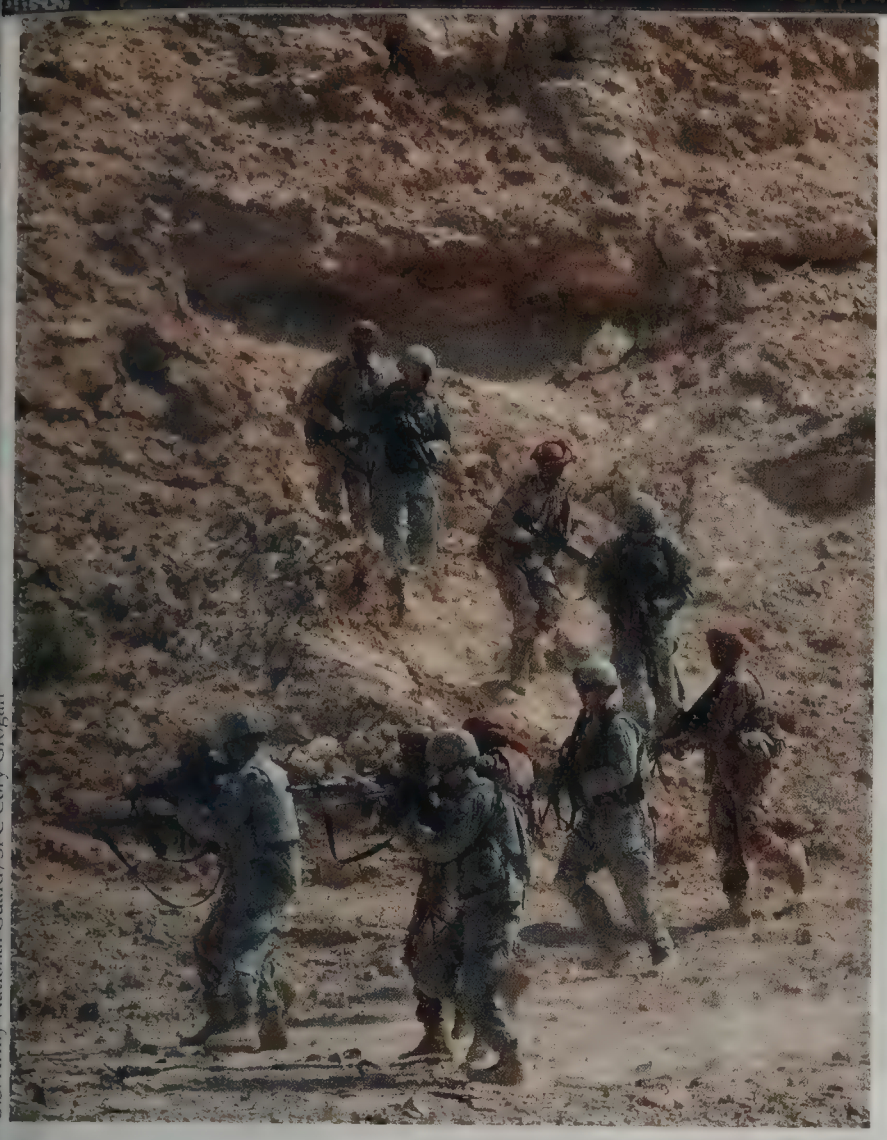
Operational Missions: The Beginning of Change

Despite doubts about the Guard's ability to mobilize in a timely manner, some 63,000 Army Guardsmen were called up and 37,000 deployed overseas for Operation Desert Storm. Most served in support units, but two field artillery brigades did see combat. Surprising the critics, more than two-thirds of the units that deployed did so within 45 days of mobilization. Once overseas, they were successful in every mission assigned. Desert Storm set the stage for greater reliance on the Army's reserve components in the decade to come, particularly as Congress reduced the size of the military as part of the "peace dividend" that followed the end of the Cold War.

In the 1990s, the ARNG shrank by 100,000 soldiers, and the active Army lost about 300,000. There were tensions and mistrust between the two as each component competed for resources in what many assumed was a zero-sum budget exercise. Pentagon strategists questioned the utility of ARNG combat formations, particularly the divisions, given the long train-up time it would take to send them to war.

---

*LTG **William E. Ingram Jr.** is Director, U.S. Army National Guard. He has commanded U.S., U.N. and NATO forces in Croatia, Macedonia and Kosovo and has taken leading roles in homeland security and disaster response in the United States. As the adjutant general of North Carolina from 2001 through 2010, he commanded more than 12,000 Army and Air National Guard personnel and oversaw the largest state mobilization since World War II.*



Soldiers from the Oregon National Guard's 1st Squadron, 82nd Cavalry Regiment, and Omani soldiers from the Royal Army of Oman move toward their objective during a squad-assault training exercise in Oman earlier this year.

It was participation in real-world missions in the 1990s that assuaged the mistrust and helped build readiness. In 1993, the Army directed the creation of a composite active-Guard-Reserve battalion for the Multi-National Force and Observer mission in the Sinai. In the mid-1990s Guard and Reserve units participated in peacekeeping missions in Bosnia and Kosovo, and by 2000 an ARNG division headquarters was commanding active duty formations there. After September 11, those peacekeeping missions were assigned almost exclusively to them. The trust developed during operational deployments in the 1990s would prove to be essential after 2001.

A Model for an Operational Force

When the ARNG began mobilizing in earnest following the 2003 invasion of Iraq, it faced the consequences of earlier policies that had relegated it to a strategic reserve. Units lacked equipment, were not staffed at wartime levels and did not have the dollars for soldiers to be trained in their jobs. The mobilization process was haphazard at times, and some units were given little notice before their call-up. On average, two battalions had to be raided of soldiers and equipment in order to mobilize a single battalion for war. Unit cohesion suffered. Readiness for the units that remained at home dropped.

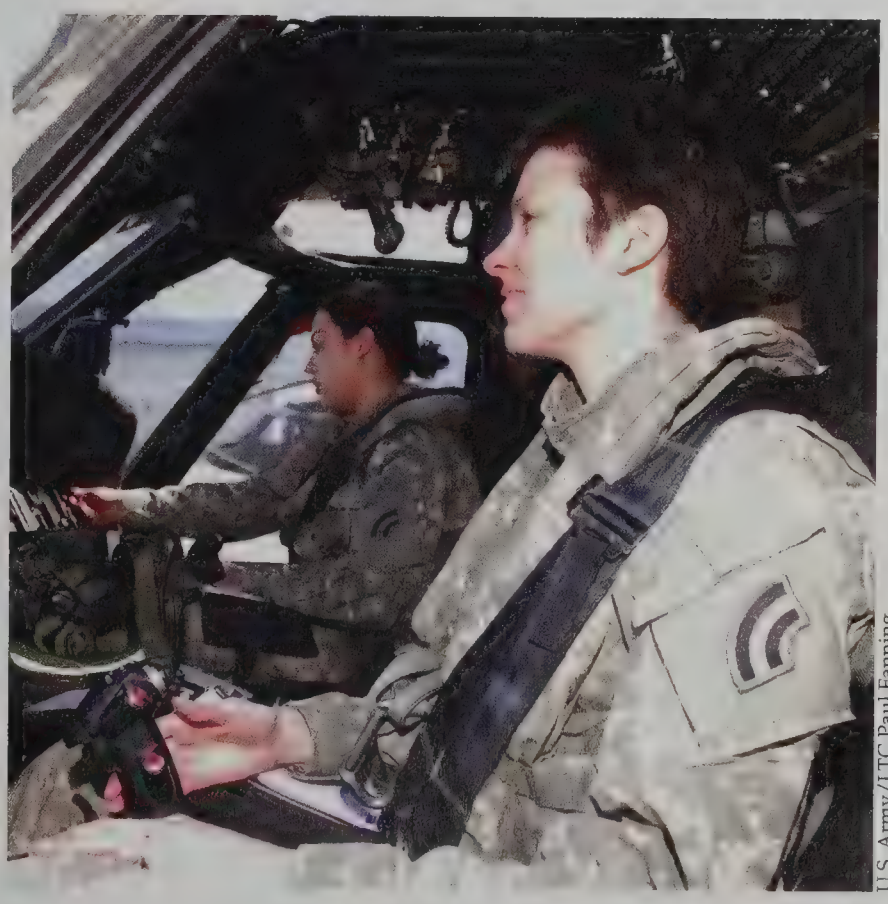
The Guard did what it had to do to support a nation and an Army at war, but as the immediate crisis passed, its leaders were determined to replace the outdated system that had mobilized and deployed units in what seemed an ad hoc manner.

Responding to a DoD requirement to implement predictable, rotational deployments for both active component and reserve component forces, the Army developed a system to ensure that all three components of the force could continue to supply trained and ready units for the warfight for as long as would be needed.

The result was the Army Force Generation model, or ARFORGEN, which provided—and continues to provide—a regular, rotational system for planning and resourcing mobilizations. For the Guard, ARFORGEN provides soldiers, their families and employers with the relative predictability they need to plan their lives. They know what to train for and when, and they know when they are subject to being mobilized. In turn, the Army receives a regular supply of trained units to fulfill its operational commitments.

With ARFORGEN, the ARNG provides up to 60,000 troops a year for deployment worldwide, including five brigade combat teams (BCTs) and a division headquarters that have had ample time to train together before mobilization, thereby minimizing the time spent "on the clock" in postmobilization training centers. Over the course of the past decade the Guard has mobilized half a million soldiers, including 44 rotations of BCTs overseas. Most of these deployments have benefitted from the advance notice, resources and training ARFORGEN has afforded them.

ARFORGEN has been an important component in transforming the Army National Guard into an operational force that is more experienced, better equipped and more ready than at any point in its 375-year history. Half of the Guard's



U.S. Army/LTC Paul Fanning

CW2 Michelle Roxby (right), a pilot-in-command, and 2LT Amy Bonilla, both of 3rd Battalion, 142nd Aviation (Assault Helicopter Battalion), conduct preflight checks in a UH-60 Black Hawk helicopter; 1,500 women serve in the New York National Guard force of 10,500.

SPC Tye Beasenburg, 4th Battalion, 118th Infantry Regiment, South Carolina Army National Guard, moves off a landing zone after the air assault portion of an embassy defense and evacuation exercise near Camp Buehring, Kuwait, in late May. The 4th Battalion assumed security-force operations in northern Kuwait in April.

358,000 citizen soldiers are combat veterans; more than 80 percent have joined since 9/11. Thanks to the considerable focus of Congress, the deficit in modern equipment has largely been made up. Now, ARNG units have an average of 88 percent of their authorized equipment; the numbers are even higher for critical dual-use equipment that is most needed for emergency response here at home.

Use It or Lose It

If the two decades since Operation Desert Storm have taught us anything, it is that an operational force requires real-world deployment experience. The more the Guard was used in the 1990s and 2000s, the more ready and integrated it became in America's defense plans. Looking forward, the Army must ensure that, as forces withdraw from Afghanistan, it continues to find regular, predictable missions that the ARNG and AR can perform to maintain their fine edge of readiness.

But why deploy Guard and Reserve forces when the drawdown in Afghanistan will leave the active Army plenty of troops on hand to take up the slack? After all, as the argument goes, those soldiers are being paid whether they are deployed or not.

It is true that reserve component forces are cheapest when they are not being used, but the experience of deploying for real-world missions is priceless in ensuring lasting readiness. Like anything else, we must practice it under the most realistic conditions possible in order to be proficient at it. The mobilization lessons employed in creating the ARFORGEN model took several years of trial and error to perfect. We may not have that much time to relearn how to deploy for the next emergency.

Our soldiers expect to be gainfully employed. Every one of them has either enlisted or reenlisted since 9/11, motivated by a desire to serve their country. One weekend a month and two weeks in the summer are not what they signed up for.

Over the last 10 years America has made a huge investment in blood, sweat and treasure to elevate the National Guard from a strategic reserve to an operational force. It is the premiere military reserve force on the planet. Despite this investment, both the Guard and Reserve still represent a remarkable value for America when compared to the costs of maintaining large standing forces—and this doesn't even begin to calculate the benefit the ARNG provides to state and local communities when disasters strike. On average, National Guard soldiers cost one-quarter to one-third of their active component counterparts. They serve on active duty only when they are needed. It would be foolish to cast aside the billions we've spent and return to the strategic reserve of the 1980s and early 1990s—a force that was undermanned, underequipped and consequently underutilized.

We know that we have entered into a period of increasing fiscal constraint. We know that the ARNG and AR are able to contribute significantly to a more cost-effective Army. The ARNG's performance during the last decade of war should have removed any doubts critics may have about its ability to tackle any mission—for the time being. The Army must remain committed to maintaining an operational force, continue to provide its reserve component soldiers with a predictable cycle of training and deployments, and employ them in real operational missions—or risk forfeiting everything that the Army and the Guard have worked so hard to build.

Preserving today's Army National Guard and Army Reserve is far more cost-effective than trying to build them from the ground up the next time our nation is threatened. Maintaining an operational reserve force further ensures the Army is approaching steady-state missions cost-effectively and guarantees the availability of the reserve components for no-notice contingency operations. ★

Agile.

Delivering a single network to all functional areas of the battlefield, even the most remote locations. That's our top priority at General Dynamics. We are working smarter and with more agility to deliver systems and products integrated to support the Joint Force so that Soldiers can more safely and effectively execute their missions.

To learn more, visit **www.gdc4s.com/army**

GENERAL DYNAMICS

©2012 General Dynamics. All rights reserved.
Photo credit: Staff Sgt. Jacob N. Bailey, U.S. Army.

The Changing Face Of Network Integration

Bradley at NIE 12.2.

If "talking the talk" can be equated with the development of the Army's modernized network communications architecture, and "walking the talk" was reflected in the evolving Network Integration Evaluation (NIE) process, then the Army should soon get credit for "fielding the talk" in the next several weeks as Capability Set 13 (CS13) begins to flow into the first eight U.S. Army brigades.

"We're out of the reaction mode now and into the state-of-the-art engineering processes and system engineering that we really wanted to get to," explained BG Dan Hughes, Director of the Army's System of Systems Integration (SOSI) Directorate in the Office of the Assistant Secretary of the Army (Acquisition, Logistics and Technology). "It is a completely different, well-engineered process that will lead us to fielding the first units in the Army with this capability in October."

Speaking during the closing days of NIE 12.2 in late May, Hughes said, "We've taken the variables out of the process, and 'the good idea fairy' disappears. You basically say, 'If it doesn't work here, we're not doing it there.' So the real message is that good preplanning and good engineering lead to success."

Hughes was quick to highlight the contributions and synergies of lab-based risk-reduction activities conducted before the NIE at Aberdeen Proving Ground, Md., as well as the engineering efforts led by COL Gail Washington, U.S. Army Program Manager Current, in integrating the system elements for the event.

Evaluations

By Scott R. Gourley

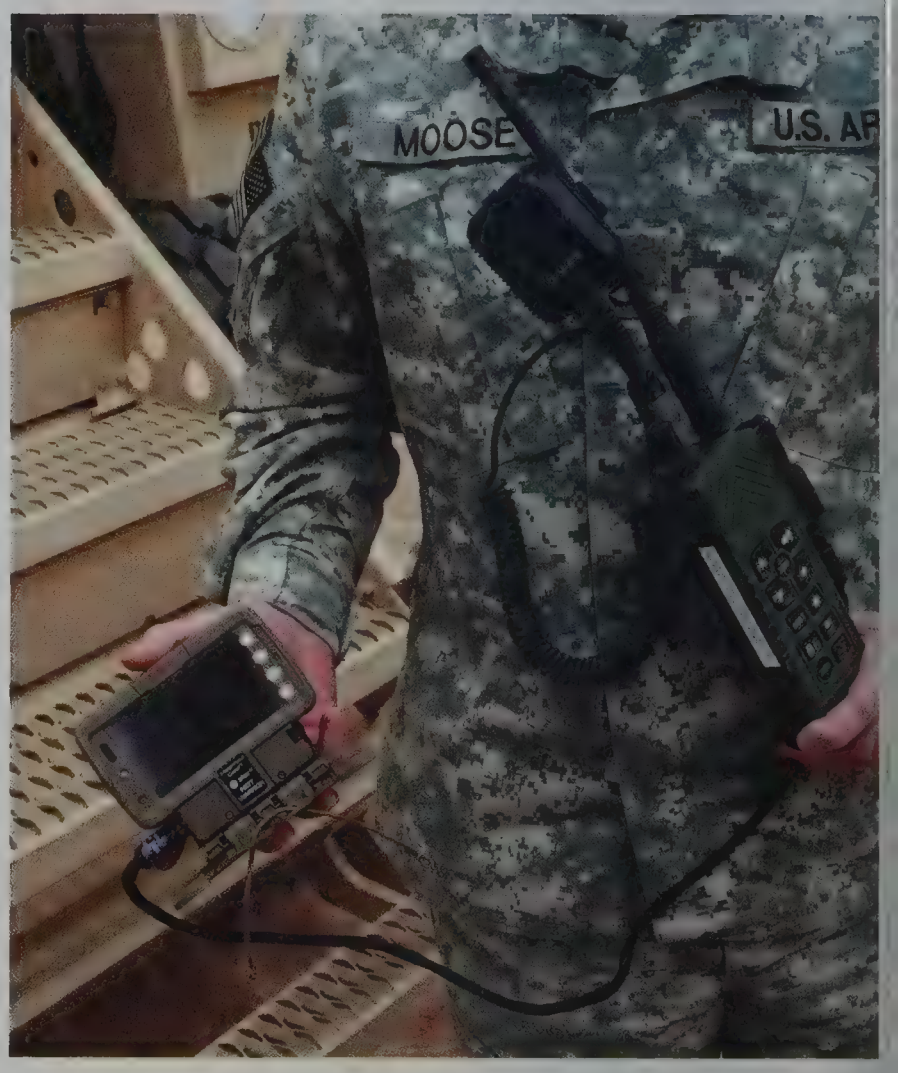
Capability Set planners note that the Army will receive greater capabilities than would ever have been fielded to Future Combat System units.

Photographs by Scott Gourley

"COL Washington and her team have put together processes right now that basically take us from industry and program of record pieces coming in. They are engineered up front; they are run through the lab-based risk reduction; through the engineering of 'golden vehicles' to learn how things fit; then building the fleet out; then testing the fleet; then performing a validation exercise to make sure the network works before we hand it to the unit; then the unit validates that it works; and then they go to the field," Hughes said.

Leaders conduct informal squad training during NIE 12.2.

The fully integrated network baseline allows soldiers to focus on executing their mission while also making it possible to upgrade new equipment very quickly.



"Last time we never got through COMMEX [communications exercise]," he explained. "The soldiers were out in the field, putting the systems together and trying to make the systems work, but this time the soldiers were executing their mission. That's a completely different paradigm.

"We have one lieutenant out there who is my litmus test on this whole thing," he added. "Last time he said, 'Sir, none of this stuff works,' and he basically walked away. But the same lieutenant at [NIE 12.2] said, 'Sir, now I get to do this cav stuff.' The less that they talk about the network, the more successful we are."

In addition to paving the way for fielding of Capability Set 13, Hughes noted that the well-functioning network also provides industry with system feedback that was not available in the past.

"Now we have a solid network, so the industry systems under evaluation get very good luck. Their dollar spent here is much better and their return on investment is much better because we have a solid network in which soldiers are looking at their equipment. You couldn't say that last time," he said.

Fielding Capability Set 13

Even as the network was being validated in the field at White Sands Missile Range, N.M., during NIE 12.2, the final CS13 vehicle integration designs to fit the network hardware into the vehicle fleet were being finalized in Warren, Mich.

"With every vehicle there are always power and space issues—basically SWaP-C [size, weight, power and cost]," Hughes explained. "So we are taking the lessons learned down here at the NIE and applying those to Capability Set 13, and our great program managers who run the vehicle programs—the MRAP [mine resistant ambush protected vehicle] program specifically—are designing 'the golden vehicles' to say: 'These are the things that fit, here's how much power we have, and here's what my budget is.' That's going really well. We know what will fit in and what doesn't. One of the keys is fitting in the theater provided equipment, which includes our jammers. How all of this works together is key."

"We are going to take those vehicles out of Warren after they're completed and bring them to Aberdeen, where we will run them on the network. Then I am going to field them to the units starting in October."

CS13 is slated for fielding to eight brigades during fiscal year (FY) 2013. The first three brigades will go to deploying units, the next three will go to "next deployers," then 2/1 AD (2nd Brigade, 1st Armored Division) at Fort Bliss, Texas, and a brigade in 8th Army in Korea. (2/1 AD will actually be the official first unit equipped to provide the CS13 baseline for upcoming NIEs.) As of this writing, the first two brigades to receive the capability will be from 10th Mountain Division.

"We know the units that will be going on the next rotations," Hughes said, "so the units that are being fielded with the best kit that we have will be on those rotations. That equipment will then likely stay as theater-provided equipment for the next unit that follows behind them. Then, as we do the retrograde from Afghanistan, FORSCOM [U.S. Army Forces Command] will determine what stays and what comes out.

"We will do the new equipment training/new equipment fielding process, and then we're going to do the validation again, before that unit signs for the equipment. Then they will go through a mission rehearsal exercise, after which they will be ready to deploy. So that network will be operational … with soldiers trained and ready, when that unit goes to war."

Noting that SOSI synchronizes the fielding, Hughes explained, "What we learned about it from COL Washington and her team is just how long the new equipment training takes. I won't take risks with new equipment training. Folks may want me to truncate it and make it quicker because it's not short, but we don't want to do that. We don't want to do what we call drive-by fieldings—when we hand them a piece of equipment without proper training—because soldiers won't use that equipment."

"This is exactly what we were planning in the very beginning," he said. "You get a set of equipment that we know works and fits on the network. The things that don't make it into that are cast aside or brought to the next evaluation, but we give the soldiers a kit that works before

---

Scott R. Gourley, a freelance writer, is a contributing editor to ARMY.

SPC Aaron Boatwright, 1st Platoon, Company A, 1-35 Armor, 2nd Brigade, 1st Armored Division, helped test Capability Set 13 equipment at NIE 12.2.

they go. We are not going to allow folks to 'show up with good ideas' after that.

"I will tell you right now, when that first unit goes downrange, we are going to find something that we did wrong," Hughes acknowledged, "but that is the [CS13] baseline and we can adjust from it. That integrated network baseline that we are striving for will allow us to adjust from where we are to something new very quickly. If I have an integrated network baseline there, and I find a new router, a new radio or something else new, I can pull the old one out, put the new one in, and I am better."

Capability Set 14 Emergence

Shortly after the first eight units begin receiving CS13 capabilities, the Army will begin building the baseline for Capability Set 14 during NIE 13.1 at White Sands Missile Range.

In January, Hughes' SOSI directorate released a "sources sought" announcement for that NIE "seeking interested industry and government sources with mature solutions to enhance existing network systems capabilities" that could be applied against identified service capability gaps.

The CS14 baseline established during NIE 13.1 will be subsequently validated back at White Sands during NIE 13.2 in the May–June 2013 time frame.

Current Army plans call for the fielding of an additional six brigades with CS14 in FY 2014 with the priority of those brigades being Stryker brigade combat teams (BCTs).

Along with the focus on Stryker, SOSI representatives note that CS14 will also begin to look at Armor BCT integration, with the exploration of government and industry solutions on the Army's heavy platforms.

More Than FCS

Hughes placed the CS13 and CS14 fieldings in a historic context by referring to the predecessor enhanced infantry brigade combat team and earlier future combat systems efforts.

"A great example that John Morrison [BG John B. Morrison Jr., Director, LandWarNet/Mission Command, Office of the Deputy Chief of Staff, G-3/5/7] and I use on a regular basis is that we will field more kits to the Army in two years than FCS would have provided to the entire 15 brigades that they had planned to reach," he said. "It's not all of the pieces … but it's capabilities. We are going to put WIN-T [Warfighter Information Network-Tactical] more places. We are going to put radios—117Gs and mid-tiers—in more places. We are going to put more Nett Warrior than we ever would have put in those FCS units. That's because we are better shoppers now."

Beyond CS14

BG Hughes outlined a number of likely changes in the process that will further improve the Army's ability to obtain and procure equipment through an NIE process that is already being referred to as Capability Integration Evaluation (CIE) in many defense circles.

"We are changing from a sources sought to an RFP [request for proposals] process, probably for 14.1 [October/November 2013]," he explained. "The first reason for that is that I may have to buy more pieces of kit from small companies to fill out the architecture. I have no way to buy that now, and contracting takes six to eight months, so I missed the window. The second piece is that if I want to buy something right after the NIE—something that is [an obvious] winner that I want to put into the next Capability Set in two months—I can't buy it because if I do a full and open contracting process down here at the end of the NIE, it just won't let me do that.

"For 14.1 we are building the RFP right now," he added. "We're building the technical specs and working with the contracting folks to make sure that we have the legal aspects ironed out, so that by 14.1 we will have this process down. The issue with that, of course, is that I will need to know my [capability] gaps earlier. The RFP process is nine to 10 months, and I can't have gaps that show up at six months. We have to figure out how to fix that process to make it more agile to go forward. We are going to an RFP process, although you may see an RFP *and* a sources sought for 14.1. You may have both because there are some things that I just know we are not going to get until the last minute.

"We are looking at how to buy quicker," he concluded. "If something is that good and we want to procure it, I have to have an avenue to procure it in a matter of time that's relevant." ★

U.S. Army

Army Veteran Teaches the

By Rachel Collins

Just three weeks into his fifth deployment to Afghanistan in 2004, SGT Falcon Bonsell, a forward observer with the 2nd Ranger Battalion, found himself on foot patrol. It seemed like a routine August day until his unit was ambushed near Forward Operating Base Tillman. SGT Bonsell and four fellow soldiers sustained injuries from mortars and direct rifle fire. Little did he know at the time that this day would change his life, cutting his tour and four-year Army career short and sending him on a long, uphill bureaucratic battle.

Bonsell was immediately evacuated by air and taken to Forward Operating Base Salerno, Afghanistan, where he underwent surgery at the combat support hospital. Afterward, he was transferred to Bagram Air Base, Afghanistan, for a brief stay, and then he was further evacuated to Landstuhl Regional Medical Center in Germany. Within three days of being injured, Bonsell had arrived at what was then called the Walter Reed Army Medical Center in Washington, D.C.

"I woke up two locations away from where I was injured. I didn't have my full faculties and couldn't take care of myself," he admitted. "I didn't even realize what had happened."

Bonsell sustained head trauma as well as multiple gunshot and shrapnel wounds from the mortars. As a result, his left lung and other organs were removed. Unfortunately, there was little documentation about his injuries and the care he received, leaving Bonsell with a lot of questions to answer for his tending physicians. When he arrived at Walter Reed, he had to be reevaluated so the doctors could determine what care he had received and how best to move forward.

Still, no records exist confirming that Bonsell had organs removed in Salerno. The only medical history that remains are the intake notes from his initial arrival at Landstuhl. His medical story, according to records, didn't begin until he arrived in Germany. The lack of documentation regarding his injuries made it difficult for Bonsell to submit the appropriate paperwork for his disability and receive follow-up care after he left the Army.

"At the time, I was extremely frustrated with Veterans Affairs [VA]. I would tell them what had happened, and they would question me. I had to get X-rays done all over again. When I was completing the VA physical, they had to prove that something had happened to me," he says. "There was no record of the surgeries. ... All of the care, pain management and follow-ups were results of the injuries I sustained while deployed, but they needed proof that it was service-related. It was extremely frustrating."

If only the paper records that were used to document his care followed him home, and if only there wasn't such an issue in proving his injuries. Sadly, this was a reality for many veterans.

Bonsell received a Purple Heart—his second—for his wounds. Eventually, the VA compensated Bonsell for losing his left lung and other organs, giving him a disability rating of 30 percent. After challenging his initial rating four times, he was able to attain a disability rating that he found acceptable.

"What price do you put on organs and quality of life?" Bonsell asked about his efforts to get compensation.

It has been nearly eight years since Bonsell was wounded, and the Army uses a much different system to document patient care now. The difficult-to-read handwritten notes and often misplaced paper records have been replaced with Medical Communications for Combat Casualty Care (MC4), an electronic medical recording system (EMR) deployed downrange. Now providers can streamline patient care and manage medical logistics digitally with one system.

Art of Medical Recording

Opposite, Falcon Bonsell, Medical Communications for Combat Casualty Care (MC4) systems administrator at Joint Base Lewis-McChord, Wash., teaches doctors, commanders, nurses and medics how to use the electronic medical recording system (EMR) to ensure each deployed soldier has a lifelong medical record. Left, then-SGT Bonsell was wounded during his fifth deployment to Afghanistan in 2004. The lack of electronic records documenting his medical care made proving his injuries were service-related difficult.

1LT Christopher Jarvis, a nurse with the 256th Combat Support Hospital, uses the MC4 system to electronically capture data on a mass casualty victim during predeployment training at Joint Base Lewis-McChord.

The electronic data alleviates the burden on soldiers to prove they were injured. With the advancement of technology and the variety of capabilities available to deployed medical staff, Bonsell has become a walking testament to why such a system is necessary. In fact, he joined the MC4 team in March 2008 as a systems administrator at Joint Base Lewis-McChord, Wash.

Today, Bonsell trains doctors, commanders, nurses and medics alike on the electronic system. He has even had the honor of retraining one of the surgeons who cared for him in Salerno eight years ago. When he travels in theater today and receives treatment in an Army facility for minor health concerns, like a cough or sneeze, the same system he trains the Army to use—MC4—captures information about his symptoms and care. The EMR system also allows the VA to see his medical record at the same time. When he returns home, follow-up care is less cumbersome because his records are accessible globally and not contingent on his memory.

"I probably had paper records, but that's what happens with paper records—they don't follow you, they get lost. With the EMR, the record doesn't get lost; it follows you throughout your career," Bonsell explained. "Even after your career, it's still accessible."

Bonsell's experience has helped him identify with other veterans who have also navigated the paper-trail bureaucracy after sustaining injuries in a combat zone. His experience, both good and bad, has informed others' opinions on how vital it is to track a soldier's medical footprint.

Rachel Collins works in the MC4 public affairs office. Her articles about the MC4 electronic medical record system are featured on The Gateway (www.mc4.army.mil).

Encouraging providers to use the system correctly is an ongoing challenge for the Army. "When providers complain about using the system, I try to share my experience with them," Bonsell said.

"I think it helps them understand that the EMR system is really for the servicemember, not them. I think they're more receptive to using the MC4 system when they hear just how much stress a soldier has to go through when things aren't electronically documented.

"When I see something not being done correctly, I'm more proactive in getting the problem fixed and showing the providers how to fix it," Bonsell says. "Sometimes people don't have full medical records; it's important that everything the provider needs to do is completed and documented."

By using an EMR system like MC4, medics and providers are reminded of the types of data they should be taking notice of, which enhances patient care in the long run.

"The EMR drills down to what is wrong with the patient. On paper, a medic would write down, 'has cough or sniffles.' Now they can say, 'has cough with something in lungs' with an actual code attached to it," Bonsell said. "Now, we're getting a more complete and accurate description of the problem, diagnosis and treatment in the EMR as opposed to having it on paper."

Technology is advancing every day, and MC4 is continually pursuing new technologies to field. Delivering telehealth capabilities to providers and soldiers downrange and preparing to field apps on smart devices are just two examples of how the comprehensive medical information system and landscape are always changing. These efforts have gone a long way in improving life after deployment for Army veterans. ★

Assignment TRADOC:

By COL David J. McCauley and
LTC William E. Bohman

BUILD THE ARMY OF 2020

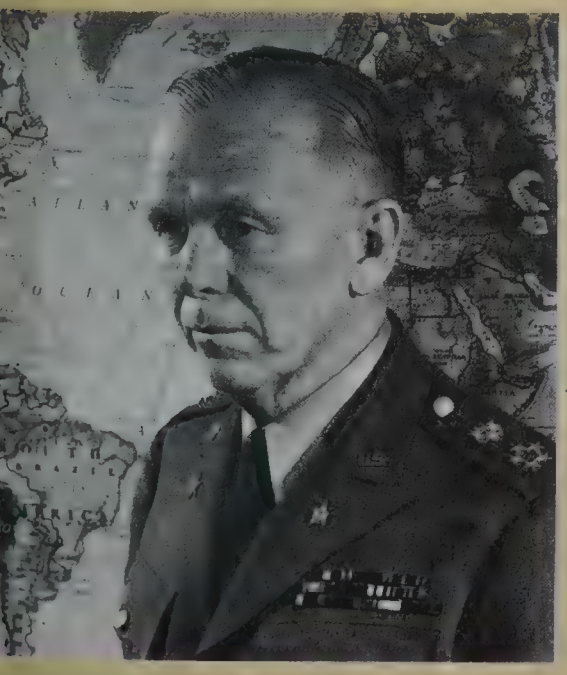
GEN Douglas MacArthur understood that developing an understanding of complex strategies and tactics would be necessary to defeat our foes. GEN George S. Patton Jr. knew that daring and courageous maneuvers were enabled by training and doctrine and were a vital component to surprising and crushing a superior enemy. So what common thread of experience ties the careers of these two great soldiers to the majority of Army Chiefs of Staff from the past 75 years? They all served as instructors or leaders in our Army's schools. Those schools, most of which form the core of today's U.S. Army Training and Doctrine Command (TRADOC), are the intellectual essence of our Army. Throughout history, our Army fostered an intellectual tradition through the continuing professional education of our leaders. That tradition included not only attendance at Army schools but also developmental assignments as key leaders within those schools.

The beneficiaries of this great Army tradition of a broadening assignment in an Army school rose to become great statesmen, renowned combat leaders or both. Luminaries such as President Dwight D. Eisenhower, Secretary of State and Secretary of Defense and General of the Army George C. Marshall, General of the Armies John J. (Black Jack) Pershing and GEN Creighton W. Abrams Jr. are honored throughout the Army and our nation's history as soldiers who led us through some of our most critical times and battles. Each man benefited from an approach to leader development that combined continuing education and a devotion to our soldiers that is at the core of our Army schools. These great leaders did more than just attend the required schools; they contributed to strengthening and improving the institutional Army by completing vital assignments as instructors, commandants or school commanders. As troop assignments become more complex with ever-increasing levels of responsibility and authority, now is absolutely the time when we need our next-generation soldiers to step forward and take up the mantle of professional leadership in TRADOC.

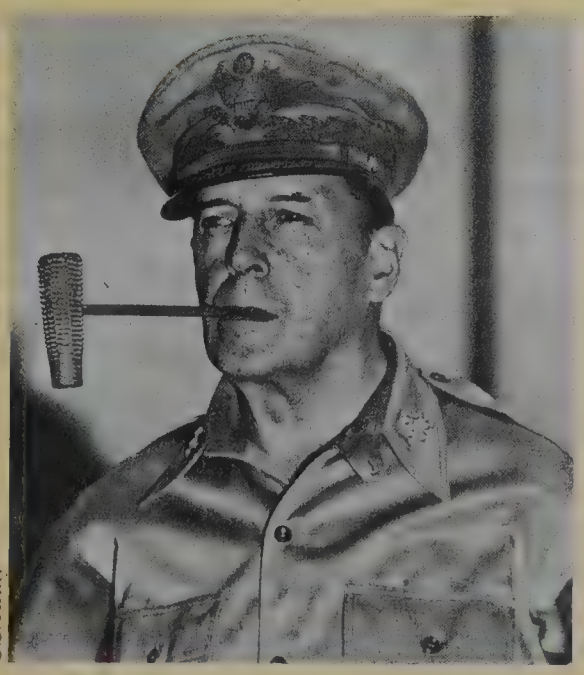
Conventional wisdom argues that all the action is in the Army's operational forces—the battalions, brigades and divisions that take the fight to the enemy. While certainly true over the past decade of war, being able to look past the present conflict and prepare for upcoming challenges—while not losing sight of the lessons learned in our current conflicts—is what will continue to make our Army great. For nearly a century, the Army ensured that the best and brightest leaders broadened their skills and experiences through important developmental assignments in the institutional Army. The best example might be the famed leadership team that led the European Campaign in World War II. Officers such as Eisenhower, Omar N. Bradley and Joseph L. Collins, to name just a few, all strongly impressed then-COL George C. Marshall while serving for him as instructors at the Infantry School at Fort Benning, Ga.

More recently, the Army has reinvested in the quality of TRADOC by assigning many of its best combat-proven leaders to command important institutions. GEN David H. Petraeus famously commanded the Combined Arms Center and personally led the writing of the Army's updated counterinsurgency doctrine. Our current Chairman of the Joint Chiefs of Staff, GEN Martin Dempsey, commanded TRADOC before his selection as the Army's 37th Chief of Staff of the Army. Within this past year, promotion board results have shown an increasing trend towards favoring TRADOC experience. The last major's list indicated a promotion rate for officers assigned to TRADOC at slightly above the Army average. The after action review from the last sergeants first class board stated that the board valued a TRADOC assignment.

Why is TRADOC relevant today, and why should you seek an assignment here? In the end, it's all about leader-



U.S. Army



GEN George C. Marshall (left) and GEN Douglas MacArthur (right) are among the successful generals who were instructors or leaders of Army schools.

U.S. Army

Soldiers from the Army's 1st Armored Division train during a recent Network Integration Evaluation at White Sands Missile Range, N.M.

ship. It's about building tomorrow's soldiers and leaders, designing their units, developing their equipment and ensuring that their doctrine will allow us to remain the finest fighting force that the world has ever seen. In TRADOC, your leadership will influence the future of the Army. Do you have what it takes to join the effort? Can your ideas, skills and talents help design the future Army and then set the forces of change in motion? Will your leadership make the difference for the next generation of soldiers? Many of the Army's best and brightest are already blazing the path in TRADOC. Will you join us?

TRADOC is much more than the Army's schoolhouse. It is integrated into almost everything within the Army. It is the architect of the future force, the standard-setter for the current force and the birthplace of Army leaders. TRADOC has exciting opportunities in a wide variety of specialties and locations. Some of the most sought-after positions include small group instructors and drill sergeants. The list does not end there, however. U.S. Army Cadet Command and Recruiting Command have exciting opportunities in every part of the country.

The breadth and depth of positions at TRADOC make an assignment here a broadening experience for any level of leader. Soldiers in TRADOC gain a depth of unmatched understanding for how the Army builds the current force while laying the foundation for the future force. Leaders here gain crucial insights into how the Army's system-of-systems approach functions to provide combatant commanders the right mix of ground forces with the right capabilities. More than 70 percent of the Army's general officers serve in the generating force, of which TRADOC is the chief component. An assignment to TRADOC is a foundational experience that helps to ensure the future success of the Army's most senior leaders.

COL David J. McCauley *is the deputy commanding general executive officer/assistant chief of staff, U.S. Army Training and Doctrine Command. He previously served as the U.S. Forces-Iraq effects coordinator, commanded 17th Fires Brigade, served in III Corps Artillery as the chief of staff, and commanded 2nd Battalion, 18th Field Artillery, in Iraq.* ***LTC William E. Bohman*** *is the executive officer to the deputy chief of staff, U.S. Army Training and Doctrine Command. He previously served in the TRADOC commander's Planning Group and as the commander of the 34th Iraqi Brigade Military Transition Team.*

What exactly can you do at TRADOC? Let's start with the design of the Army of 2020. Do you think our maneuver brigades should have three maneuver battalions instead of two? Should all the battalions in a brigade be the same, or is a mix of infantry, combined arms and Stryker battalions optimal? Is it best for all our brigades to be identical or should we have a mix of different types of brigades? Does the current brigade combat team structure have the right mix of supporting arms, or do we need more engineers or artillery? Is the Army's current mix of functional and multifunctional brigades right? Are we prepared to fight across the full range of military operations based on these decisions? These are the questions that TRADOC's Army Capabilities Integration Center (ARCIC) is answering for the Army today. Your contribution could determine our future course.

Are you more interested in equipment modernization? ARCIC recently activated the Brigade Modernization Command (BMC) with 2nd Brigade, 1st Armored Division (2/1 AD) operational control. The BMC field-tests the latest technology semi-annually in exercises called Network Integration Evaluations. The BMC is ensuring that the equipment we field is what our soldiers need. BMC does this by putting prototypes in the hands of the soldiers of 2/1 AD early and often to ensure that the designers' concepts merge perfectly with the needs of the soldiers in the fight.

If equipment modernization and force design aren't for you, how does training, doctrine and leader development sound? TRADOC's Combined Arms Center (CAC) is aggressively shaping the Army of 2020 in three crucial areas.

CAC is launching a revolution in training focused on significant improvements to home-station training. CAC envisions an integrated training environment that challenges soldiers by replicating, as closely as possible, the complexity of the current and future operational environments. The goal is to restore the role of Commanders as the primary trainers of their units by providing the opportunity to train at home station in an environment that approaches a combat training center-like experience.

The integrated training environment will heavily use simulation and gaming technology to allow soldiers and small units to build base proficiency by focusing on the fundamentals before expending time and resources to train in the field. By entering field training at a higher proficiency level, units will maximize time spent in the field to achieve the highest possible levels of training readiness. Training in the 21st cen-

tury, to the greatest extent possible, aims to make the scrimmage as hard as the game.

Are you a student of the Army profession but have grown tired of poring through thousands of pages of doctrinal manuals to stay on top of your game? Was our doctrine relevant on your last combat deployment? Do you or your subordinates spend more time learning the latest tactics, techniques and procedures from online forums rather than from the Army's published doctrine? The rapid pace of change in today's conflicts has driven our leaders to collaborate in order to ensure that they are ready when their units deploy. The Army's systems for doctrinal development and capturing lessons learned have not kept pace.

You can change that. TRADOC is looking for a new generation of doctrine writers and professional experts who can distill their experiences and knowledge into the precepts our future leaders will rely upon to train and fight. Can you use technology and your experience to ensure that our doctrine keeps pace with the fight and always remains relevant to the force?

TRADOC is tackling this problem head on. Do you want to ensure that the Army gets doctrine as well as tactics, techniques and procedures right? Join the team at the CAC as they completely revamp our doctrinal system. The Army recently released the first in a new series of doctrinal publications, Army Doctrine Publication (ADP) 3-0 *Unified Land Operations*. The most remarkable aspect of this new manual may be its size—just 14 pages long. The new ADPs will capture true doctrine, fundamental principles that have stood the test of time and are unlikely to change. These new manuals will be short and easily understandable.

The new ADPs will be supported by three types of manuals. Each ADP will have a supporting Army Doctrinal Reference Publication that contains further detailed information on the fundamentals. The tactics and procedures the Army employs will continue to be captured in traditional field manuals. Finally, in a change that promises huge potential, the most current techniques our units employ will be codified in "wiki-ized" techniques publications. As the name implies, users in the field can recommend changes to these publications, thus enabling the Army to rapidly capture and publish the most recent battlefield innovations.

One of the most salient lessons learned from the past decade is the vulnerability of our smallest tactical units. Our enemies understand they cannot hope to defeat us at the company level and above. Instead, they seek to overwhelm our platoons and squads as they conduct decentralized operations. They know that at the small-unit level their chance for success is greatest. TRADOC is working to ensure that our smallest tactical formations have the same capability to overmatch their opponents that our larger units enjoy.

TRADOC's U.S. Army Maneuver Center of Excellence (MCoE) at Fort Benning, Ga., is developing a series of initiatives to improve the lethality, protection and leadership capabilities of the Army's squads and platoons. While the MCoE

U.S. Army

An Army drill sergeant (right) directs the action at Fort Jackson, S.C.

leads this effort, collaboration is tightly integrated across TRADOC, including the TRADOC staff, ARCIC and CAC, to ensure that all elements of equipment modernization, leader development, training and doctrine improve the capabilities of the Army's squads and platoons.

The most decisive element to the success of our small units is leadership. Leadership from the team level through company command resides with our least experienced leaders, yet they are the ones at the point of contact. They need the benefit of your experience as they build their skills in TRADOC's schoolhouses. Now, as in the past, instructor positions in TRADOC schools offer an outstanding opportunity to lead by example to build our future leaders and soldiers. Highly valued positions as small group instructors and drill sergeants will enable you to critically shape our budding warrior-leaders. Join the TRADOC team to help ensure that our soldiers on point have the best leaders possible.

TRADOC is leading the Army into the future. The war in Iraq is over, and the war in Afghanistan is slowly winding down, but TRADOC is more active than ever. As the Army looks forward, the focus in TRADOC is to determine how the Army will transform to meet the needs of the nation. The best and the brightest are already swelling our ranks to help build the Army of 2020. An assignment to TRADOC allows you to make a significant contribution now while broadening your ability to be a future leader.

The hard-won experience you gained leading soldiers over the past decade of conflict gave you the skill set required to make a difference in the Army's future. TRADOC is the place to put that experience and those skills to work for the good of the Army as an institution and for the benefit of the next generation of America's sons and daughters when they step into harm's way.

Whatever your interest—force design, training, education, leader development, small tactical units or doctrine—TRADOC has a place for you, and no matter the position, you will know that you are making a serious contribution to the Army of 2020. ★

The Buck Stops at

Harry S. Truman at the Command

Fort Leavenworth

...nd General Staff College

By LTC Eric A. Hollister

Background: Don Middleton, Inset: U.S. Army

Benefiting from the proximity of his Presidential Library and home, the U.S. Army Command and General Staff College (CGSC) at Fort Leavenworth, Kan., hosted Harry S. Truman three times in the early 1960s—in January and December of 1961 and in February 1964. Thanks to recordings held at Leavenworth's Combined Arms Research Library, we know that at all three of his appearances, President Truman delivered a variation of the same address. Although the content of his speech was interesting, his off-the-cuff deviations were what truly captivated the audience.

He typically began by calling the presidency the most misunderstood constitutional office in the United States. He lamented that "there is no single publication that preserves the utterances and the acts of the presidency. And many of them can only be found inadequately in newspaper files. And in a lot of instances that inadequacy is purposely done. I know from experience."

Truman discussed the importance of preserving the personal papers of the President, and how those of past Presidents had tragically been lost, destroyed or scattered. "You know every paper a President touches, even if it's cussing out to a music critic, is an official document [interrupted by big laugh] and ought to be preserved." He went on to explain his library's founding in relation to his presidential papers. "I built a building down there in Independence, Mo., and turned over between four and five million documents ... and they all belong to you. They're public property. ... If you want to know something about me that's not printable, you come down and take a look. You'll find plenty!"

Truman then stated that being President is the most difficult job in the history of the world, and that it is more like holding six jobs at once. First, Truman said, the President must ensure that laws are faithfully executed. Second, he is the Commander in Chief. It was at this point that Truman normally took a not-so-thinly-veiled shot at GEN Douglas MacArthur, whom he relieved during the Korean conflict: "I don't know if you remember or not, if you read

Opposite from left: Harry S. Truman, U.S. President from 1945 to 1953, was a guest at the U.S. Army Command and General Staff College (CGSC) at Fort Leavenworth, Kan., three times in the early 1960s. Grant Hall, with its domed clock tower, has long symbolized Fort Leavenworth. Truman greets an allied officer during a January 1961 visit to the CGSC.

National Archives

U.S. Army

Above, Truman sat next to his wife, Bess; daughter, Margaret; and his sister, Mary Jane, at the groundbreaking of his Presidential Library in Independence, Mo., in 1955. Right, clashes between Truman and GEN Douglas MacArthur, commander of United Nations forces in the Korean War, cost MacArthur his command.

your history, President Lincoln had to fire four generals before he got one that worked. I only had to fire one, but that was one too many. It shouldn't have happened. I didn't get any pleasure out of it at all. I didn't appreciate that situation and never have and never will appreciate it, because there wasn't any necessity for it to happen. It was just a big-headed fool who thought he was better than the President and found out he wasn't."

The next three presidential responsibilities, according to Truman, are creating U.S. foreign policy, providing information on the state of the Union and approving laws, and acting as head of his respective political party, which, Truman noted, is not outlined in the Constitution. Regarding this last duty, he offered a caution: "[The President] must never forget that he is responsible to all the people in the nation, regardless of party, and he must always think of the welfare of the nation as a whole. The President and the Vice President are the only officers elected from the United States at large, and as I've said time and again, the President is the only lobbyist in Washington who looks after the interests of 150 or 160 million people."

The final duty of the President is to act as social head of the nation. It is quite apparent that Truman didn't enjoy this job very much: "A great many of the stuffed-shirt-social-life people in Washington like this very much. They think it's the finest thing in the world to be able to meet dukes and princes and kings and queens and other dignitaries of foreign countries. … The President gives five or six state dinners each year and holds several large receptions. And if you think it's a lot of fun to stand in line for two-and-a-half hours and shake hands with 2,700 people whose names you can't even understand and whose names you don't give a damn about, just try it some time and see how you like it."

Truman fielded questions during two of his CGSC appearances, even though this was normally not done during graduation ceremonies. The question-and-answer sessions during his visits were fascinating and humorous. When asked to comment on the Peace Corps, Truman responded that the more we know about each other the easier it will be to get along. He then added:

> This little snot down in Cuba is trying to make it appear that we [interrupted by laughter] want to be aggressors. We could have kept Cuba as part of the United States, just as Puerto Rico is now, if we wanted to do it. We wanted Cuba to be free, and we still want Cuba to be free. That fellow's no good. I've always said if that fellow had a shave and a haircut and a new set of clothes he'd have a different outlook on life.

This question was followed by one asking what advice he would give to President-elect Kennedy regarding the United States' relationship with Cuba. Truman responded

---

*LTC **Eric A. Hollister** is an Army force manager currently developing and teaching force management curriculum for the Command and General Staff College at Fort Leavenworth, Kan. His previous assignment was as the 25th Infantry Division's force integration officer, during which time he spent 15 months in Iraq providing force management support for all of Multinational Division-North. This article is an excerpt from a book he is writing on guest speakers at CGSC from 1949–2001.*

that Kennedy wouldn't want his advice, adding that "fellas on the sideline got no business trying to tell him what he ought to do." The Bay of Pigs incident occurred just three months after these two remarks.

Not surprisingly, questions regarding the use of the atomic bomb came up. One student stated that some historians felt World War II was over before the bomb was dropped, and asked Truman why he decided to use the bomb. Clearly he had fielded this question before:

> There are a lot of Monday morning quarterbacks that know exactly what ought to have been done after the fact but don't know a damn thing about it beforehand. The atomic bomb, at that time, was a weapon of war. That first bomb cost 2 billion, 600 million dollars to make. And the objective was to win the war. And that bomb was dropped in Japan when they absolutely refused to consider surrender. A few days after that bomb was dropped they surrendered. ... 250,000 youngsters were saved on our side, 250,000 on the Jap[anese] side, and about 1 million were kept from being maimed for life. That bomb was a weapon of war, and if I had to do it again on the same circumstances I'd do it just like I did then.

This answer was followed by thunderous applause. When asked about his most difficult decision, Truman's answer probably surprised a few people in the audience: "Korea was the most difficult decision, because that involved the whole of the United Nations, and not only the United States."

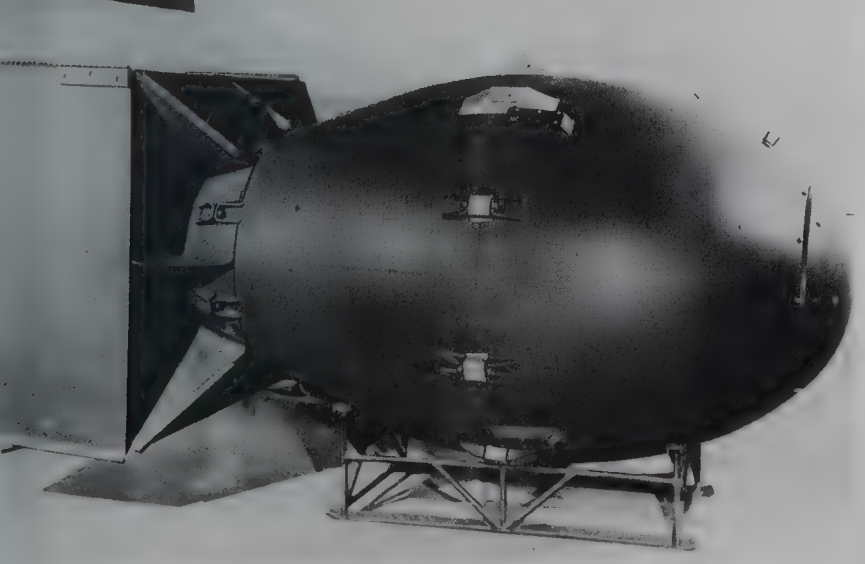
The most interesting and little-known part of Truman's visits to CGSC took place after his December 1961 graduation address. He had been working on a series of television programs that would eventually become *Decision: The Conflicts of Harry S. Truman*. The producers of the series felt that Truman's actions during the Korean conflict would have to be included in the program. It was decided that Truman would meet with veterans of the Korean conflict and answer their questions, and all of it would be filmed for use in the series. Nineteen officers—15 Regular Course students and four faculty members—met with Truman following the Associate Course graduation ceremony for introductions and as an icebreaker of sorts. Following lunch, the two-hour filmed session began.

According to a proposed script for the event, held in the Post-Presidential Papers collection of the Truman Library, the session would begin with Truman providing some opening remarks. The notes themselves are an interesting read, as the "script" is clearly offered as a suggestion: "The President may wish to say that as far as he knows never before in the history of the United States has a former Commander in Chief of the United States spoken to veterans in a war in which they both took part." The script suggested the President cover his service in the Army and his time as Commander in Chief during the end of World War II. The script went on to suggest that he highlight how that war was an "old-fashioned war" that began with an attack and ended with a surrender, likely the last time this would take place. In addition, it was felt he should cover some Korean history, his reaction to the first news of the invasion by North Korea, and related United Nations Security Council actions, among other recommendations.

The event was a fascinating and fairly candid question-and-answer period that has been well-hidden from history. Numerous aspects of the conflict were covered, including the decision to commit troops in Korea, possible utilization

National Archives

Below, Truman authorized the use of atomic weapons against Japan in August 1945. The second bomb, detonated over Nagasaki, Japan, was of the "Fat Man" type. Right, at his White House desk during the Korean War, President Truman signs a proclamation declaring a national emergency.



of Chinese National troops, captured weapons analysis and the role of the press.

A recurring topic was public support and understanding of the Korean conflict. An officer remarked on the appearance of doubt on the part of the American people and asked the President if he felt they understood that it was absolutely necessary to go into Korea. Truman began his answer before the question was finished, stating: "They understood it at the time, and there was nobody against it. … I never heard of anybody being against it at all. Even Dewey was for it." Later, then-MAJ Lewis L. Millett, who was awarded the Medal of Honor for actions in Korea, said that while en route to receive his medal, he had spoken to many civilians. They seemed "very disinterested and didn't care anything about what was happening over there." Truman was then asked if he felt that the public was psychologically prepared to support the Korean War. He responded, "Well, of course it was. I never had any trouble with it at all. All that trouble came on account of that campaign that came after that, and nothing whatever to do with the reasons or why it was necessary to save the Korean republic."

forces and the restrictions placed on commanders in Korea. This theme began with a question regarding the extreme austerity of the U.S. Forces in Japan. Truman's response was remarkable: "Because it was the opinion of all concerned that the war was over and we were going to have a peace and get things straightened out and mama and papa and all the kids were crying [in a mocking tone] 'I want to go home'… we had to bring them back home, that's all there was to it. They still do that."

A similar question addressed the age and dearth of equipment available to forces in Korea. Truman replied (sounding much like Secretary of Defense Donald Rumsfeld in 2004), "We had to use what we had. That's all we had." When asked about funding limitations for Korea, Truman continued: "A great many of the appropriations I asked for were turned down, or they came too late to be of any use."

The most dramatic line of questioning involved the support given to the effort and the restrictions placed on the command in the Korean theater. Sometimes these questions seemed to irk the President. It began when he was asked if he had given any guidance to GEN Matthew Ridgway before he took over Eighth Army. Truman replied, "Well of course. I told him he was commander in chief, go ahead and win the war the best way he could, just like I did to every other field commander. He had complete freedom of action."

National Archives

In December 1961 at the Command and General Staff College, Truman met with 19 officers—all veterans of the Korean War—for a question-and-answer session on the conflict. Originally scheduled for inclusion in a television program, the tense and candid session was recorded, but most of it ended up on the cutting room floor.

"Complete freedom?" Truman was asked.

"Except that he was not to cross the Yalu River if he ever got there. That's all there was to it."

At this point an officer said that his division had been ordered to stop at the 38th Parallel around October 1, 1950, "while the United Nations made certain deliberations as to whether or not the U.N. would be authorized to go in to North Korea." This delay allowed North Korea to fortify its position in front of the U.S. division, causing heavy casualties once it was authorized to continue. The officer

Truman was later asked if he felt that calling the Korean conflict a police action downgraded it in the minds of the American public. Again, he interrupted the question with an emphatic "No. I don't think so. I think those that would want to downgrade it would have downgraded it no matter what you called it." When asked to explain the difference between a police force and an Army, he responded, "Well if we are at war, a declared war, with any nation then the military [is] in control. And that's an Army of the United States. When we are in conjunction with the United Nations to prevent aggression, that is a police action to prevent the whole world from being involved in an atomic war." Truman was then asked if he thought police actions were an example of what we would face in the future. "That was the intention, exactly," he said.

Understandably, the students were keenly interested in Truman's thoughts regarding the readiness of the ground

BLIND
DISAPPEAR
STROBE
PREVAIL

www.surefire.com/M720V

The versatile M720V RAID™ WeaponLight provides white or infrared light with a turn of its bezel selector ring. Two separate dials control white and IR output levels, allowing you to choose blinding white light or just enough illumination to navigate—all activated by a stealth remote tape switch. Powerful strobe and flashlight modes can also be dialed in. The M720V puts all this control in your hands—where it belongs. SUREFIRE

NSN: 6230-01-590-2412 (black)
NSN: 6230-01-592-9028 (desert sand)

Selected for USSOCOM Visible Bright Light III program

Call your TLS/GSA Supplier to order now

Mrs. Robert Weeks, president of the Fort Leavenworth Women's Club, greets the former President in January 1961. After his last visit, in February 1964, the officers' wives continued to invite Truman to their luncheons.

asked why the necessary authority to cross the 38th Parallel hadn't been foreseen to prevent something like this. This seemed to put the President on the defensive:

> Well now you'll have to ask the commanding general in the field, I wasn't there. I gave them freedom of action and the man in the field is the man who does the commanding. Makes up his mind what tactics and strategy should be. The President can't make tactics and strategy in the White House because he's not there. If I'd have been on the ground I could have told you exactly what to do if I'd been there, but I wasn't. Wasn't because I didn't want to be. … I was not the commanding general in the field and that's his business. He had all the support he could get from the President.

Another officer followed up: "In other words there was no restriction at all?"

Interrupting and raising his voice a little, Truman stated, "I said he had all the support he could get from the President of the United States, and that was up to him, if he had some good reason for it, I'm sure. The best way to find out is to ask him, if he's still alive."

Later an officer asked, "Back to your previous comment about the commander in the field. Am I to understand, sir, that you gave the commander in the field the authority to marshal all available resources to defeat the enemy?"

Truman's answers on this subject were getting shorter. "Yeah, of course. He always has that, and if he doesn't he's handicapped. But he had one restriction. And that was he was not to go far enough north to bring on a third world war. That's what we were trying to avoid. We didn't want an atomic war. Nobody wants it."

The grilling continued. "Well in that same vein, Mr. President, when the Chinese planes would take off from beyond the Yalu and bomb the American forces, our planes in pursuit had to stop at the Yalu River. This was a restriction imposed by the President, is that right?"

Truman answered, "Yes. That's correct. That's absolutely correct."

Not surprisingly, nearly all of this question-and-answer period ended up on the cutting room floor and never made it into the television program. Fragments of seven of the President's responses ended up in the "police action" segments of the "Decision" program, and most of those were altered and re-recorded. The reason for this is summed up eloquently in a draft page of the preface of Merle Miller's *Plain Speaking: An Oral Biography of Harry S. Truman*: "One dark winter morning in 1961 [Truman] drove alone from Independence to the Army Staff and General Command School [sic] in Fort Leavenworth, Kan., where he discussed [the Korean] decision with a group of young Army officers, all of whom were veterans of the Korean fighting. Several of the questions annoyed him, and he said so, sometimes unkindly; we had to photograph the seminar several times. It was not a happy morning."

Perhaps it is understandable that after this experience, Truman didn't return to the college for two years. Three months after that final February 1964 visit, he turned 80. Later that year he tripped going into a bathroom in his residence, hit his head on the sink and fractured two ribs. There is no record of any further CGSC speaking invitations, although the officers' wives continued to invite him to their luncheons, and in 1968 he received an informal open invitation from MG Michael W. Davison to visit the post any time. Truman died December 26, 1972.

On multiple occasions in the 1960s, students at the Army's Command and General Staff College were treated to something truly special: a living legend who was also a fantastic public speaker. Those of us who were not there are fortunate that these appearances by President Truman were recorded and will forever remain available to future generations of students at CGSC and to students of history as well. The fact that the college played a small role in the legend that was Truman's life makes these appearances a unique piece of Fort Leavenworth history. ★

Early Bird Exhibit Space Rate Now Available!

The Association of the United States Army's Institute of Land Warfare

ARMY AVIATION SYMPOSIUM AND EXPOSITION

A PROFESSIONAL DEVELOPMENT FORUM

9-11 JANUARY 2013

Gaylord National Hotel and Convention Center
National Harbor, Maryland

Visit www.ausa.org for more information.

AUSA, Industry Affairs: 800-336-4570, ext. 2665

Early Bird Exhibit Space Rate Now Available!

The Association of the United States Army's
Institute of Land Warfare

AUSA WINTER SYMPOSIUM AND EXPOSITION

A Professional Development Forum

20-22 FEBRUARY 2013

Greater Fort Lauderdale/Broward County Convention Center
Fort Lauderdale, FL

Visit www.ausa.org for more information.

AUSA, Industry Affairs: 800-336-4570, ext. 2665

JIEDDO Explores New Robotic Tools for the 'Enduring' IED Threat

By Scott R. Gourley

U.S. Army/SSG Stephen Schester

U.S. Navy/PO2 Jonathan Chandler

The Department of Defense Joint Improvised Explosive Device Defeat Organization (JIEDDO) conducted its inaugural Counter-IED Robotics Challenge recently. Partnering with the Tank Automotive Research, Development and Engineering Center (TARDEC), Army Capabilities Integration Center, and the Maneuver Battle Lab, JIEDDO crafted the Challenge as an element within the 2012 TARDEC Robotics Rodeo, which was held June 20–29 at the Maneuver Battle Lab at Fort Benning, Ga.

Tanekwa Bournes

JIEDDO is using the competition to give robotics systems vendors a way to quantitatively distinguish their products and to identify those products best able to rapidly satisfy warfighter needs.

As outlined in JIEDDO's recently released "Counter-IED Strategic Plan 2012–2016," the U.S. employs three mutually supporting lines of operation in its counter-IED (C-IED) capabilities: attacking the network, defeating the device and training the force.

U.S. Army/SSG Matthew Scotten

U.S. Army/SSG Cory Thatcher

During training at Bagram Airfield, Afghanistan, 10th Sustainment Brigade soldiers learn to operate the PackBot tactical robot. More than 250 systems have been fielded to date.

The C-IED Robotics Challenge event seeks to identify new systems and technologies to be employed in defeating the device, which encompasses technologies used to detect IED components, neutralize the triggering devices and mitigate the effects of an IED blast.

The Challenge was highlighted at a recent industry robotics conference, which also provided a venue for JIEDDO representatives to discuss the current status of IED mitigation and neutralization systems as well as some of the directions that those systems may take in the next few years.

"As we all know, IEDs are the 'weapon of choice,'" observed CDR Cedric Richardson, U.S. Navy, JIEDDO Defeat Branch chief, "and we don't think, as a JIEDDO organization, that this threat is going to go away anytime soon. We think this will be an enduring capability and that JIEDDO will be postured in the future to have some effects on the IED as a platform."

Richardson said that JIEDDO is continuing to explore new industry developments that could be applied to the unmanned ground vehicle (UGV) portfolio, while applying lessons learned from tactical experience as well as various capabilities from demonstration environments.

Identifying several capability gaps being addressed by robotic research and development initiatives, he explained, "In my 'lane,' we are specifically focusing on trying to mitigate and neutralize the device—countering it, if you will—and we want to see how robotics can assist in that. We are basically taking the soldier, sailor, airman and marine out of the loop, effectively keeping them safe while they are monitoring the robot system and our platform that is going out and doing the work and neutralizing that [IED] threat."

Shifting the spotlight toward dismounted operations, Matt Way, a JIEDDO program integrator, recalled, "In the 2008–2009 time frame, when [then LTG] Stanley McChrystal came into theater, there was a significant shift to COIN [counterinsurgency] and a push for warfighters to get out of their vehicles and conduct more dismounted patrols. As a consequence, we immediately saw an uptick in IEDs targeting our dismounts, and today that is still where we are seeing the greatest portion of our casualties and loss of life."

Noting that IEDs are primarily directed against dismounted forces "to impede their freedom of maneuver," he said, "If they can occupy a unit with an 'IED belt' or take their focus away from the counterinsurgency mission, then they are being successful. So through our technology we are trying to improve their freedom of maneuver and also to speed it up as well."

Other dismounted C-IED technologies recently fielded range from the Small Projected Line Charge, a plastic-bonded explosive rope deployed by a small rocket, to dismounted counter radio-controlled IED electronic warfare (CREW) systems.

"We have a lot of enablers," he said, "but again we are not satisfied with the rate of advance, since it can take all day to deal with an IED, keeping soldiers away from their true objective."

According to Way, one of the biggest challenges for robotics or any C-IED technologies in Afghanistan involves the terrain faced by warfighters on a daily basis.

"This is where we run into the challenge with robotics and how it is going to operate in that environment," he said. "You've heard some of the other [conference] panelists say that the warfight is the toughest environment for a UGV, but that doesn't mean that we don't try to push technology there. That's really what JIEDDO is trying to do."

Perhaps ironically, the robotic operating environment is further complicated by the presence of some of the other enabling C-IED technologies, as with radio links between operator control units and the robot that must function in a CREW-constrained electronic environment.

Against those myriad challenges, the organization has provided support in the fielding of a range of dismounted UGV capabilities through systems like iRobot's 710 Warrior, QinetiQ North America's TALON, iRobot's 510 PackBot, Exponent's MARCbot, and what JIEDDO calls the Devil Pup, the new Small Unmanned Ground Vehicle (SUGV) from iRobot.

One area of recent JIEDDO exploration involves the testing and fielding of even smaller ultra light recon (ULR) robotic platforms—rugged, low-light camera platforms in the 1.2 pounds–11 pounds range that are capable of providing soldiers with situational interrogation capabilities. Examples include the iRobot 110 FirstLook and the ReconRobotics Recon Scout XT among other systems.

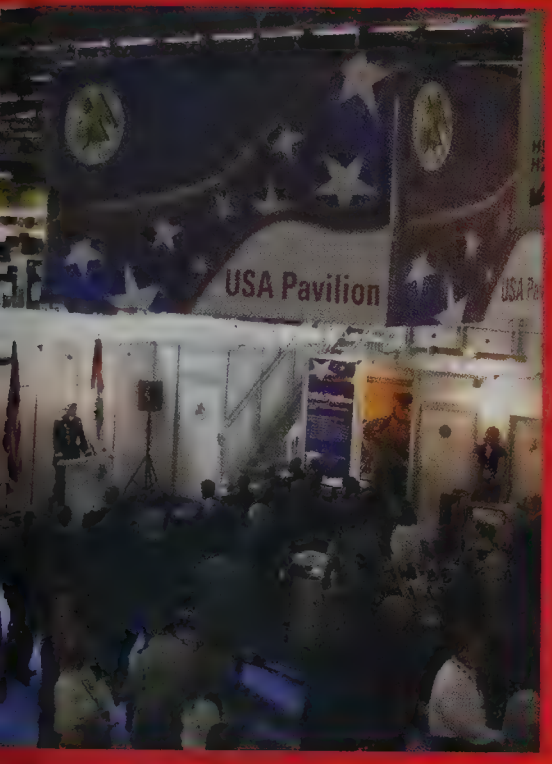
"In May 2011 the requirement came down for the ULR robot," Way explained, "and the capability gap here is that SUGV is still too heavy to carry. If you think about the terrain and think about carrying a 32-pound robot for several miles over the entire day you can imagine how strenuous that would be."

Scott R. Gourley, a freelance writer, is a contributing editor to ARMY.

Association of the United States Army's

USA Pavilion

at IDEF 2013



rly Bird rate - $810/m²,
ffective until 1 October.
Standard rate - $910/m²

7-10 May 2013

Istanbul, Turkey

For exhibit space sales, contact
Amy Frankenstein at 703/841-4300 x2413
or intlprogram@ausa.org.

www.ausa.org

He said that the ULR investigations involved something of a parallel approach: "While we are simultaneously ramping up for sending systems to theater, we are also able to work with the Maneuver Center of Excellence and Maneuver Support Center of Excellence to conduct some CONUS [continental United States] assessments. Not only has that process provided us with another chance to look at performance but it has also allowed us to develop initial CONOPS [concepts of operations] and TTPs [tactics, techniques and procedures] that we can now give to the warfighter. Those will definitely change in theater, but it gives them a starting point in understanding how to employ these new types of technology."

In addition to the ongoing fielding of initial quantities of ULR systems in theater and another upcoming ULR assessment with the Marine Corps in the June 26–28 time frame, current JIEDDO exploratory activities include something known as robotic pointman, the ability of a UGV to actually go out with a dismounted patrol.

"It's controversial when we talk about this type of capability with theater," Way acknowledged, "but in the dismounted arena we see that much of 'the low hanging fruit' has already been grabbed for counter-IED. So now we are starting to tackle the really tough problems to continue to mitigate the threat."

Noting similar work being performed by the Army's Rapid Equipping Force (REF) with the QinetiQ North America Minotaur prototype now downrange, Way said, "We are looking at shrinking the form factor and really looking at the mobility and the control mechanisms to see if a UGV can truly stay out there with a dismounted patrol without being a burden."

"That's something key in robotics that we have found," he added. "You really have to show a high payoff in counter-IED capability and low burden for [a system] to be accepted."

Way said that JIEDDO has been looking at three separate platforms, three separate payloads and two separate controllers to date, although other alternatives and/or technologies could be applied.

"What we are trying to do is help define what the requirement would truly be for a dismounted UGV to go out there on patrol," he said, "and a big part of what we are looking for out of the [C-IED] Robotics Challenge in June will be for other enablers that could be applied to this type of program for a robotic pointman."

Recognized challenges to the concept include things like the extent of tactical liability to warfighters if a robot is damaged or destroyed while out on dismounted patrol.

Tanekwa Bournes

The Joint Improvised Explosive Device Defeat Organization (JIEDDO) partnered with private industry, government labs and the Department of Commerce in recent trials in Gaithersburg, Md., to test lightweight robots for use in Afghanistan.

"Those are the kinds of things that we can debate on paper or on slides, but we want to actually take advantage of our resources, put something together, push the technology to start tackling these tough questions, and really see what is feasible and what isn't," Way said. "At the same time, we see niche capabilities in which these robotic platforms offer a real contribution, with examples like the Minotaur, which is out there with the REF, and the DOK-ING M160 [robotic] flails that are having some mission impact."

JIEDDO saw the inaugural C-IED Robotics Challenge as a venue to help identify new robotic enablers that could be applied to warfighter support assets.

Participating robotics were divided into three categories: portable robots (requiring 200-meter transport of all system components), dismounted support robots (capable of passing through a vertical opening 3 feet wide by 5 feet tall), and mounted support robotics (systems too big or too heavy for the other two criteria).

The challenges themselves were grouped into four areas: endurance, reconnaissance, detection and disruption, with each challenge area having both required and optional subcomponents.

In the endurance challenge, for example, participants had an opportunity to go as far and as fast as they could on the range roads at Fort Benning. Along the way, robots with mapping or sensing capabilities had the opportunity to perform "change detection" with the course being altered between iterations. Other measured endurance traits included how long a robot could effectively remain on station.

The reconnaissance challenge, dubbed The JIEDDO Easter Egg Hunt, included small plastic egg-shaped containers, each labeled with a four-digit integer and scattered around the inside of a military-operations-in-urbanized-terrain facility and tunnel facility. Robots were given a set amount of time to identify the numbers and colors on as many eggs as possible.

Emphasizing that the organization's efforts are continuing to focus on pushing robotic technologies forward into theater, Way said, "While the reality of the situation is that we are looking at a drawdown in theater, we are still looking to push robotic technology because the bottom line is that it is still one of the best ways to create that standoff between the soldier and the threat." ★

CompanyCommand

Building Combat-Ready Teams

To: Future Platoon Leaders
From: Current and Past Platoon Leaders

The Crush of Requirements from Higher Headquarters

Thanks to some amazing conversations in the CompanyCommand online forum and a subsequent survey built upon those conversations, we are gaining clarity on the top challenges currently facing company commanders. The number one challenge turns out to be managing the overwhelming onslaught of requirements imposed by higher headquarters.

In this article, commanders first report on the nature of the challenge and then share some practical tips for leading effectively in a high-task environment.

In a 2002 monograph titled "Stifled Innovation? Developing Tomorrow's Leaders Today," Army War College professor Leonard Wong reported that "the total number of training days required by all mandatory training directives literally exceeds the number of training days available to company commanders. … Company commanders are forced to choose which mandatory training is executed and which is not." One of Wong's overall insights was that "senior commanders increasingly are disrupting training with administrative requirements and taskings." The wars in Iraq and Afghanistan—and the relentless cycle of deployments they brought about—soon overtook the issues that Wong had raised.

The Army in 2012, however, looks increasingly like that of pre-2002. Once again, the Army is focused primarily on training and preparing for war, not on deploying to war. Once again, company commanders expect to (and are expected to) manage their units' training. And, perhaps not surprisingly, once again a major challenge for company-level commanders is dealing with the crush of requirements (training and administrative) mandated by higher headquarters.

Commanders Describe the Crush

These recent comments from company commanders convey their frustration with today's situation:

- It is unbelievable how many changes and last minute taskings come down on a daily basis. There are times when training has been "protected," yet requirements from battalion and higher interfere because they are "urgent."
- Last minute changes by higher are so out of control that no one believes a long-range training calendar or even that planning beyond 72 hours is worth the effort.
- Everything is such a high priority that it makes it seem like nothing is really a priority. And I attribute this to the fact that field-grade officers can simply forward emails without doing any mission analysis.
- There are too many AR 350-1 [*Army Regulation 350-1: Army Training and Leader Development]* PowerPoint requirements, which we will never be 100 percent on. We have to do a better job at prioritizing what's important.
- We need to re-examine the mandatory, check-the-block online training that sucks thousands of hours away each year without a good return on investment. Perhaps we need to have some mandatory online training twice a year to correct this.

Commanders Lead Through the Crush

Liam Walsh

Recognize that you are going to have to prioritize everything and that not everything can get done. We tend to be the

"My time as company commander," says Liam Walsh, "has made me realize that I can't do everything well."

Stay organized, set priorities and learn to delegate, advises James Kadel.

type of people who want to do everything exceptionally well, but my time as company commander has made me realize that I can't do everything well. I could do a great job training my Soldiers, or take care of every Soldier's personal problems, or be on top of UCMJ [Uniform Code of Military Justice] chapters, or do a great job with awards and recognition, or have a great PT [physical training] average. It goes on and on. At the end of the day, we can't do it all exceptionally well, and that came as a shock to me. With the tempo of resetting from a deployment, training up for another one, and getting out the door, you simply cannot do everything well. Set realistic training objectives and train to those standards, but be grounded in reality. I would contend that you will be a much more effective leader having some sense of balance in your life rather than going home at 2100 hours, eating dinner at 2200 and going to bed.

John Schmitt

When I first took command, I would answer the phone on the first ring, respond to emails right away, and get my "products" in right away. I became the guy who could be counted on to do those things. But with more experience, I realized that there was a never-ending supply of urgent calls and emails from higher—so much so that if I kept it up, I'd never invest any time in what were actually important—training, developing and taking care of my Soldiers. So I just stopped answering. I deleted emails that had been thoughtlessly forwarded with "HOT" and walked away from a ringing phone if I was on the way out to troop the line. That probably sounds childish, but it was intentional and thought out. That was the only way I could force those on the other end (staff mostly) to think farther ahead and not rely on the assumption that I would jump through hoops to make their urgent deadline. It caused some friction at first, but the volume of calls and emails decreased to only the ones that were actually HOT. When I had the inevitable confrontation with a staff officer all full of piss and vinegar who tracked me down on the flight line to find out why I had blown off the last "10 TPS report covers," I just shrugged my shoulders and said, "Well, sir, I was busy commanding."

James Kadel

What we are really talking about is time management. With all of these admin and paperwork issues, the question

"One thing to take into account," says Juan Carleton, "is what your boss thinks is important."

Dan Hodermarsky found that "assigning additional duties to platoon leaders energizes [them] to help with admin requirements."

oils down to: How can I, the commander, manage my time n order to focus on what I want to focus on? Here are hree things that work for me:

■ *Stay organized.* This might sound easy, but it's more han just stacking paperwork and keeping your desk clean. o me, staying organized means finding a method to track verything that needs to be done.

■ *Set priorities.* Which targets do I spend time taking down first? Which tasks can I assume risk in either completing late or not at all? Provide guidance on your priorities to your subordinates, too. If your company XO [executive officer] has three tasks to accomplish but only has the ime to accomplish one, does he/she know which one hould take priority?

■ *Delegate.* As the commander, there are a certain number of tasks and actions that only I can do. It is important hat I spend my time doing the things that only a commander can do. This means delegating all of the other stuff to ny subordinates. You will be amazed at how much your unit an accomplish when everyone pulls together as a team.

Joe Byerly

I developed a commander's battle rhythm with all of our uarterly, monthly and weekly requirements listed. After I reated that list, the admin monster didn't seem as overhelming, but then came the unplanned "Soldier incidents." uring my first command, I felt like I was drowning in the dal wave of on-the-job training that comes in the wake of hings like congressional letters, DUIs [driving under the influence], testing hot on a urinalysis, arrests, suicide leation, etc. By my second command, I had a smart book ith all the regulations, policies and action-step checklists, which allowed me to be much more efficient and effective. I recommend building a book like that before you take command. A great place to start is the *Commander's and First Sergeant's Quick Reference Guide to Army Regulations.* Both the guide and my own battle rhythm are posted in the CC forum.

Juan Carleton

There are not enough hours in a day to complete every task no matter how you plan. So what is important? One thing to take into account is what your boss thinks is important. Get what the boss wants done first. My corps commander emphasized getting Soldiers home on time. Therefore, my division commander also made that one of his priorities. One Friday afternoon, after I had released my Soldiers, I was walking to my car and passed my fellow company commanders who still had their Soldiers working. It was before a deployment and there was always more to do. Out of nowhere I heard, "Captain, halt!" I turned and looked. It was the commanding general. I thought, "This can't be good." He asked me who I was and if I had anything to do with the formations of Soldiers he saw around. I told him I had sent my Soldiers home and that I was on my way home as well. He asked if I had a family, and I said, "Yes, sir. I do." He then looked at me and told me that I was the only commander who had any sense.

Jim Warner

Batching or stacking requirements is a great way of saving time. When you go to the motor pool for a few hours, you can do a 10 percent inventory, inspect motor stables, sign parts orders, conduct leader training, review the dead-

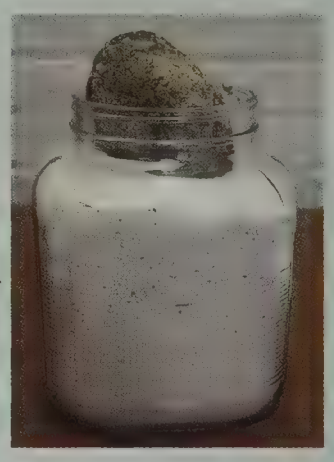
Excerpt from *Taking the Guidon: Exceptional Leadership at the Company Level*

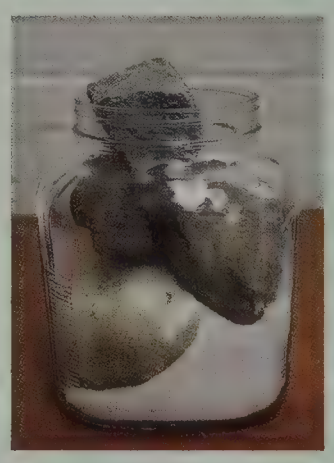
OK, we know that there just isn't enough time to do it all. However, if you have figured out what the "big rocks" are for your outfit, you can be focused on what is important and not waste time worrying about what doesn't really matter in the long run. Stephen Covey, in his book *First Things First*, tells a story that explains what a big rock is. At a seminar, the instructor pulled out a jar and asked the students how many rocks he could fit in the jar. After filling up the jar with rocks, he asked if it was full. Of course, it appeared to be full until he poured a large cup of gravel into the jar. After then pouring another cup of fine sand into the jar, the students began to understand the point he was making:

> Figure out the important things and put them in your life first (first things first).

The alternative is to let the "small" but often urgent stuff fill up the jar, not allowing any of the big rocks to fit in at all. We have talked to several commanders who were frustrated following their time in command. They felt as if they were treading water during their commands and were never able to accomplish the things they intuitively knew were important. They had allowed the urgent but not really important things to dominate their calendars.

Of course, first you must actually know what the big rocks are. Once you know what they are, place them on the calendar, to include everything that must come first to make them quality events. The things that are not big rocks for the outfit will often still need to get done; however, you will purposefully not invest the same time and effort into them. The key to success here is communication with the company and, if necessary, with your boss. If your leaders are a part of developing what the big rocks are in the company and fully understand what is going on, they will no longer be frustrated when a "little rock" event isn't so hot. In fact, they will be motivated because they will have a newfound sense of satisfaction knowing that the things they think are important are being planned and executed to a high standard.





You can always see people's real priorities by the way they spend their resources—if you look at their calendars and checkbooks, you can identify their real priorities. The same is true for your unit. Look at your calendar and other resources to see if there is alignment between your vision and where your resources are going. If there is not alignment, it is time to make some changes.

Put your unit's "big rocks" into your jar (training schedule) first. Otherwise, all the sand will crowd out what's most important to your unit.

line report, etc., but only if you planned for that and only if the right people were notified in the training meeting to have set those conditions. Have a small number of routines you ruthlessly follow. The most important routine is the meeting cycle. At the company level, you can get everything into a weekly training meeting. The company training meeting should end with everyone knowing all their requirements in detail for a week and in general for the next two. Concentrate on the company support elements—supply, arms room, etc. They are the most likely cause of last minute adjustments when people figure out they need support that was not previously coordinated.

Lisa Paradee

Before command, I was the person who wanted to do everything on her own, but I have quickly learned that that doesn't work in command. I have been blessed to have a wonderful staff that is always more than ready to help with anything they can and to offer up advice on how to make things work more efficiently. I am also fortunate to have one of the previous commanders working here full time at the facility and can seek advice from him. I ask questions, and I use my team to accomplish things that can be done at a lower level. I've broken down the tasks that I must complete and I've delegated the rest.

Ari Martyn

When my company was being overwhelmed with UCMJ chapters, one of my FIST [fire support team] members, a college graduate E-4 who could type and write well, tore something in his shoulder and wasn't able to go to the field for the next three to four months. I made him my company paralegal, set him up with some office space, a computer, and an email account. Since we had limited FIST training that period he worked almost full time on chapter packets. The rest of the FIST became his assistants as he needed. He became the subject-matter expert, resulting in a nine-day cycle from me deciding to chapter someone for discipline issues to that Soldier being gone. The process became quick and painless for me, my 1SG and my subordinate leaders.

Dan Hodermarsky

Assigning additional duties to platoon leaders energizes the lieutenants to help with admin requirements, and it also trains them for future jobs—supply officer and arms-room officer are two examples. I briefed the lieutenants on the applicable regulations and on my expectations and standards, and then I used them as my points of contact for those areas of company business.

Michael Weisman

Maybe there are some guys out there who have really amazing people who can help break off the admin workload, but I would argue that that is rare. I found through all three of my commands that even with talented subordinates, there is no avoiding the paper crush. It is ridiculous how the admin requirements and Soldier issues take away so much time from actually training for war. As a platoon leader in 2004–2005, I did not have a government laptop and didn't really need one; now there's so much administrative paperwork that it's impossible for a platoon leader to be effective without one. I hope that doesn't come off as venting, but this particular issue is near and dear to my heart. You don't have a staff as a company commander, but every commander and staff above you will treat you as if you do.

Charles Bies

Probably not the right answer, but after a while you start to develop a "Spidey sense" of what's an important tasker and what is, in effect, a knee-jerker from higher up in the chain. Once I figured out what the knee-jerkers were, I sat on them, kicking the can down the road, even for one or two days. In that time, HHQ [higher headquarters] typically fixated on a new "shiny object" and the previously important tasking would disappear off the radar. You'll be able to tell which taskers you can do this with and survive. Generally, the genuinely important taskers that are worth your time are either directly related or only one or two connections away from a battle-focused event. Sometimes these tasks, though not trivial, are reactions to events elsewhere that are overprioritized. A few years ago, for example, two Soldiers drowned in their body armor, and the shiny object across the Army was to cancel all training and get hundreds of thousands of Soldiers into swimming pools wearing IOTVs [improvised outer tactical vest]. I'm not saying that water survival training is unimportant, but it's not so important that it necessitates canceling ranges and leaves. My company kicked the can on this tasker for three days, conducting previously planned training, and the next week HHQ didn't care anymore about water survival training.

Jim Warner

There is no greater privilege, no higher honor than command. The company begins to reflect your personality within weeks of taking command. It reflects you in more ways than you are even aware. You will shape how Soldiers, NCOs and junior officers perceive your unit and view the Army. When you leave command, you will forever miss those soldiers. Savor every minute you have. Manage the frustrations. You don't need to excel in everything. You need to decide where to excel and where to deliberately take risks. You may pay for the risks you take, but you will make that decision for your Soldiers. When you take care of them with good decisions, they will take care of you. Respect earned from Soldiers will be your greatest source of personal pride and achievement.

• • •

The consistent top challenge company commanders are currently facing is managing the overwhelming onslaught of external requirements, to include last minute taskers from higher and having more mandatory training than can be done in the amount of time available. Dr. Wong identified the acute nature of the problem in 2002, and it appears a decade later that the problem is even bigger. Now we have even more requirements—consider the amount of time that commanders are investing these days in high-risk Soldiers. While we assume that our battalion and brigade commanders will step up to the plate to identify priorities and help shape organizations that put first things first, we company commanders have a responsibility to discern what tasks are most important, to communicate effectively with our bosses and our subordinates about them, and to be disciplined and collaborative in our approach, making the most of all assets available. We can't get it *all* done. We can and will seek to do the most important things.

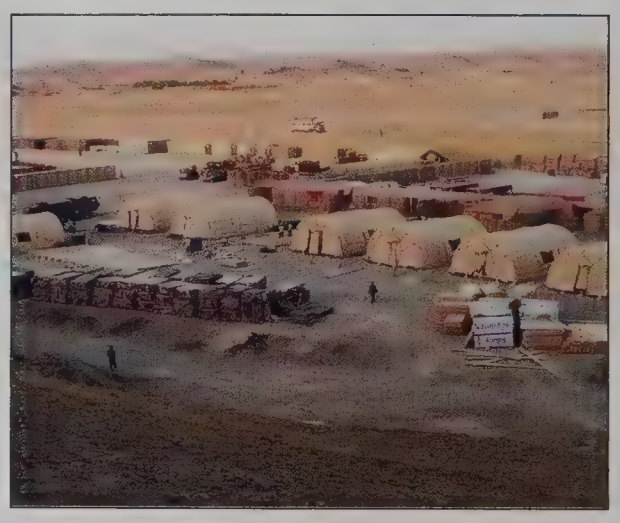
When like-minded professionals come together in conversation to discuss their shared challenges and generate solutions, they and their organizations become more effective. If you are a currently commissioned officer who is passionate about leading combat-effective teams at the company level, we invite you to log in to http://CC.army.mil and join the conversation.

AUSA Sustaining Member Profile

Fluor Corporation

Corporate Structure—Number of Employees: More than 43,000 on six continents. Date of Foundation: Founded as a construction company in 1912. Chairman and Chief Executive Officer: David T. Seaton. Fluor Government Group President: Bruce A. Stanski. Government Group Headquarters: 2300 Clarendon Blvd., Suite 1100, Arlington, Va. 22201. Telephone: 703-351-6440. Website: www.fluor.com.

Fluor Corporation is a global leader in engineering, procurement, construction, maintenance and support services to the oil and gas, mining, industrial, infrastructure, power, and government markets with more than 80 percent of its new work performed internationally. Fluor's Government Group has supported the U.S. government since the Manhattan Project in 1945. Today, it is a $3.5 billion segment of the Fluor Corporation with the U.S. Departments of Defense, Energy, Homeland Security, Labor and the National Aeronautics and Space Administration. Fluor provides support for contingency operations, engineering and construction, base operations and life support services, equipment, and energy-related programs.



In its centennial year, Fluor is celebrating unparalleled success with its markets underpinned with a legacy of safety and ethics. For six years in a row Fluor has been named among the world's most ethical companies by the Ethisphere Institute, and for the past six years Fluor has earned the recognition as one of the most military-friendly hiring firms by *G.I. Jobs*.

Contingency Operations

Through the U.S. Army Sustainment Command's Logistics Civil Augmentation Program (LOGCAP) IV contract, Fluor supports DoD and coalition forces with construction, logistics and life-support services during natural disaster and military contingency operations worldwide. Today, Fluor is supporting operations in both Afghanistan and Africa.

In Afghanistan, more than 25,500 people, including nearly 10,000 Afghan nationals, support LOGCAP at multiple locations. Fluor manages the infrastructure and utilities for numerous bases and facilities that include housing and office areas, utilities, infrastructure, and vector control services. It is also responsible for water production and distribution and power generation.

Logistical support is provided from strategically located distribution centers for linens, furniture, tents, tools, fuel, construction materials, barrier equipment, vehicles and maintenance repair parts. Theater transportation support includes air, vehicle and fuel operations, including bulk, retail and aircraft refueling.

In Africa, Fluor is constructing and will operate several remote camps supporting U.S. military forces. Support services include the provisioning of food, fuel, water, laundry, showers, vehicles, power generation and maintenance.

Engineering and Construction

As a leading global engineering and construction firm, Fluor excels in the design and construction of complex projects in challenging and austere environments. Fluor supported the U.S. Army Corps of Engineers (USACE) operations in the U.S. Central Command (CENTCOM) area of responsibility and constructed numerous facilities for logistical support, joint operations centers and troop barracks, and power generation. Supporting the U.S. Iraq reconstruction program, Fluor provided numerous new facilities including water treatment plants in Erbil and Nasiriyah and a power plant at Khor Al-Zabair that significantly improved capacity.

Fluor provided engineering and construction services to USACE for the construction of the critical missile defense infrastructure in Alaska, as well as several Defense Threat Reduction Agency projects in Russia and Azerbaijan.

Base Operations, Maintenance and Life Support Services

As the largest single provider of services to the Federal Emergency Management Agency's (FEMA) response operations, Fluor has executed numerous projects in support of FEMA's Public Assistance Program and the Individual Assistance Programs. Fluor has supported FEMA through some of the most challenging disasters, including the World Trade Center attacks, the 2004 Florida hurricanes, and Hurricanes Katrina/Rita in 2005 and Gustav/Ike in 2008.

Fluor provides base operations support and construction services supporting continental United States and DoD facilities and bases outside the continental United States. For USACE, Fluor provided base operations, maintenance and life support services to the Gulf Regional Division across Iraq and maintained the Baghdad Victory Base Complex continuously for more than eight years.

Power and Energy Program

Leveraging decades of commercial power expertise and experience, Fluor has responded to critical DoD power requirements. Early in the Operation Iraqi Freedom campaign, Fluor supported USACE Task Force-Restore Iraqi Electricity and completed multiple projects from replacement of transmission and distribution lines to power plant overhaul. Fluor continues to support DoD CENTCOM needs under two USACE contracts for rapid support of power needs across Afghanistan. With a full spectrum of power and water capabilities, Fluor is positioned to support the emerging demand for renewable resources in support of federal Net Zero Energy mandates.

Equipment Services

AMECO, a wholly owned Fluor subsidiary, is a key provider of integrated, rapid response construction equipment and vehicle and tool solutions to government and industry worldwide. For the U.S. Tank Automotive and Armaments Command, AMECO provides specialty outfitted vehicles for the new Iraqi army and national police. AMECO also prepositioned construction equipment for Iraq and Afghanistan for the U.S. Air Force Red Horse construction teams.

Soldier Armed

Common Infrared Countermeasures

By Scott R. Gourley

With the recent denial of a contract protest by the U.S. Government Accountability Office (GAO), the Army is again moving forward on the technology development (TD) phase of the Common Infrared Countermeasure (CIRCM) program. Consisting of a laser-based countermeasure that will be integrated with an aircraft survivability equipment suite, CIRCM represents the next generation of lightweight, low-cost countermeasure systems designed to work in conjunction with missile warning systems throughout the armed services.

According to LTC Christopher Brown, U.S. Army Product Manager for Countermeasures in the Program Executive Office for Intelligence, Electronic Warfare & Sensors, infrared countermeasures, particularly the advanced threat infrared countermeasures (ATIRCM) and common missile warning system (CMWS), "have been an effort for DoD since the early 1990s."

"The Army/Air Force/Navy entered the engineering and manufacturing development phase [of ATIRCM/CMWS] in 1995," he said, "and the CIRCM program has evolved directly from that effort.

"In January 2004 the Joint Requirements Oversight Council approved the suite of integrated infrared countermeasures operational requirements document," he added. "That is the base document for ATIRCM and CMWS, and it still is our initial capabilities document for CIRCM. It met the criteria to serve as our baseline documentation to move forward, and CIRCM evolved from that suite of integrated infrared countermeasures requirement."

A July 2008 operational need statement prompted the Army to work toward fielding a quick reaction capability for ATIRCM. That capability is now fielded on all deployed CH-47s.

The reason for that is weight. The current ATIRCM weighs 320 pounds. The large aircraft infrared countermeasure, currently used by the Department of the Navy and Department of the Air Force, weighs 408 pounds.

"ATIRCM only works on the CH-47 fleet because it's too heavy," Brown said. "So in September 2008 we were directed by the Army Acquisition Executive to pursue a lightweight system—in lieu of ATIRCM. Then, later on, the Office of the Secretary of Defense also directed that we develop a next-generation ATIRCM—called CIRCM—to replace the ATIRCM with a lighter weight solution to put on our other aircraft."

Brown outlined a CIRCM concept of operation that "will either use the common missile warning system or the joint allied threat awareness system that the Navy is currently working on. So CIRCM works in concert with a missile warning system—solution independent—and provides a laser countermeasure once the missile warning system has detected the threat and hands it over.

"The way that works right now with ATIRCM is that CMWS, on a CH-47, declares an in-bound infrared missile and hands it over to ATIRCM; ATIRCM finds it with the flare tracker, confirms the threat, and then ATIRCM fires a laser onto that threat that essentially jams the missile and causes it to miss."

Northrop Grumman

Northrop Grumman's compact, lightweight, fifth-generation infrared countermeasure technology is at the heart of the company's U.S. Army common infrared countermeasure (CIRCM) self-protection system.

"CIRCM complements flares, our current infrared countermeasure systems," Brown explained. "Lasers don't run out. Flare buckets can run out of flares, but lasers can fire a significantly greater amount during a mission. And it also enables a quicker reaction time against infrared missile threats."

Primary threats to be countered include man-portable air defense systems (MANPADS) as well as vehicle-mounted infrared systems and potential air-to-air infrared systems.

"Our concern is that MANPADS have proliferated throughout the globe," Brown said. "They reside in every country in which the United States military operates. This will also allow us to provide continuous discrete protection when flare dispensing might not be a preferred method. For example, we don't necessarily want to go into an area in a covert fashion and then drop flares, but lasers provide for a more covert type of countermeasure to an infrared threat."

After a 2009–2010 process that included a "re-validation" of the requirements document and a broad agency announcement process exploring possible vendors with technically ready solutions, the program was structured with a "Milestone A" (MS A) that would be followed by a two-year technology and development (TD) phase. The request for proposal (RFP) for that TD phase was released to industry in February 2011.

Brown said that the RFP drew responses from five vendors: ITT, Northrop Grumman, BAE Systems, Lockheed Martin and Raytheon.

A notational depiction shows a U.S. Army CH-47 Chinook equipped with a common missile warning system/ advanced threat infrared countermeasure (CMWS/ATIRCM) suite as it defeats an infrared guided missile.

The MS A defense acquisition board met in December 2011 with two resulting TD contracts awarded to BAE Systems (Nashua, N.H.) and Northrop Grumman (Rolling Meadows, Ill.) in January 2012. A subsequent GAO protest of those awards was denied in May, with the two contractors now moving forward on their TD activities in a competitive environment.

Although CIRCM is expected to be adopted as a joint service solution, current estimates call for the Army to buy more than 1,000 "B-kits" and more than 3,000 "A-kits."

"The B-kit is the major hardware for the system," Brown said. "It includes the black boxes like the laser, the control unit, the computer and the software that goes into the system. The A-kit includes the wiring and the components that hold those B-kit components on the aircraft. For every aircraft type there is a unique A-kit, so an AH-64D will have its own A-kit. It will have the same B-kit as the CH-47, but the A-kits will be different."

Under the current TD phase, the two vendors are scheduled to deliver some prototype hardware in months nine and 10. The contractors will then have the opportunity to take that hardware into one of the Army's two laser infrared test and evaluation (LITE) labs—one in Woodbridge, N.J., and the other at Aberdeen Proving Ground, Md.—and use the resulting information to inform their designs prior to the preliminary design review (PDR). The formal PDR will take place around month 14 of the TD phase, followed by the delivery of prototype hardware for government testing in month 16.

"We're going to test that hardware in our LITE labs," Brown said. "Based on that testing we will understand whether they have met the exit criteria to leave the TD phase, and that will support how we move forward to the next milestone review."

Although still "in the infancy" of developing the acquisition strategy for the follow-on engineering and manufacturing development (EMD) and production and deployment phases, he acknowledged the possibility of carrying multiple vendors through EMD.

Longer range plans call for the initial fielding of CIRCM into the UH-60 Black Hawk fleet and first unit equipped milestone in fiscal year 2019.

Asked for his message to warfighters about the current TD phase of CIRCM, Brown said, "This allows us to get a fully autonomous capability out to every platform in our fleet; to allow soldiers to fight the mission and not worry about the infrared threat. The beauty about our missile warning and laser-based countermeasure system is that it works on its own. I can get in an aircraft tomorrow, having not flown in a long time, and all I will have to do is turn CIRCM on, and that is as proficient as I need to be to use it. This is going to allow our men and women to get out there in the cockpit and not worry about that infrared threat on any of our platforms." ★

Reviews

The Evolution of the U.S. Army

Kevlar Legions: The Transformation of the U.S. Army, 1989–2005. *John Sloan Brown. U.S. Army Center of Military History. 539 pages; index; maps; illustrations; $50. Available as a free downloadable PDF file at the publisher's website: www.history.army.mil.*

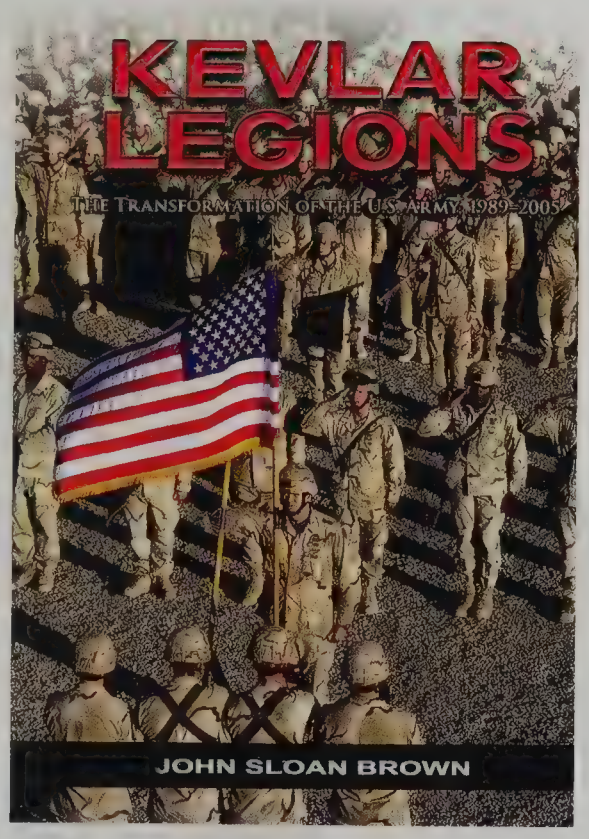
By BG Harold W. Nelson
U.S. Army retired

Everyone who cares about the Army needs to read this book, and not just because it is on the Chief of Staff of the Army's (CSA) Professional Reading List. It provides a sound theoretical framework for thinking about transformational change in the Army, sets the broad context that shaped the post-Cold War transformation, describes the transformational efforts chronologically and thematically, and speculates on the way ahead. Whether tomorrow's Army evolves from today's or endeavors transformational change, John Sloan Brown's insights will help light the way.

ARMY readers have become familiar with BG John Sloan Brown, U.S. Army retired, through his fine "Historically Speaking" articles. He was already a mature Army leader and a Ph.D. historian when the Army transition began, and he was an essential player in many of the situations he describes. His firsthand familiarity with the people, processes, organizations and sources gives his work an immediacy and power seldom encountered in official history, and his analytical strength gives it a level of objectivity seldom encountered in a history of recent events.

The thesis is stated several times: From 1989 through 2005 the Army transformation was a centrally directed and institutionally driven attempt to achieve a revolution in military affairs relevant to ground warfare that exploited Information Age technology, adapted to post-Cold War strategic circumstances, and integrated into parallel Joint and Department of Defense efforts."

This transformation—like others that had come before—"represented adaptation to new strategic circumstances, socioeconomic change, and technological advances," much like those others required by Army leaders who could "decide on a way ahead, wrap up debate, and market the transformation inside the Army and out."



The organization chosen for the first five historical chapters reflects the vital role of the leader. Generals Vuono, Sullivan, Reimer, Shinseki and Schoomaker each get a chapter. Only the last half of GEN Vuono's tenure as CSA is addressed because that is when the external forces triggering transformation coalesced, and only the first half of GEN Schoomaker's term is included because the pace, intensity and breadth of Army warfighting operations rolled transformation initiatives into deploying brigades and terminated many theoretical debates on organizational, technological and doctrinal questions. "[F]ocus had understandably shifted to reinforcing capabilities most relevant to success in Afghanistan, Iraq, and the Global War on Terrorism as it evolved."

Coverage of the entire period, 1989–2005, is important because, as Brown notes, "Some now characterize the events of 2001 as the pivot point that launched the Army in new directions. As we shall see, the pivot point was actually 1989, and the Army since 2001 has been following through and capitalizing on changes that started because of the end of the Cold War."

In Brown's view the Cold War Army was designed to evolve continuously and thoughtfully, but incrementally. GEN Vuono sensed that a different approach would be needed and directed staff efforts that forced a choice between the traditional mobilization model of the 20th century and a high-readiness deployable Army in which the entire force would look more like the old XVIII Airborne Corps. He chose the latter, setting the foundation for GEN Sullivan's mantra, "What we keep we keep trained and ready," during the downsizing that began in 1991.

Brown recognizes the importance of GEN Sullivan's modern Louisiana Maneuvers in helping leaders at every level in the Army appreciate the attraction of long-term change while linking theory to practice in an environment characterized by lots of good ideas, very little money and an uncertain future. This top-down positive attitude toward change linked to improved warfighting ability set the foundation for GEN Reimer's Force XXI and Army After Next. Excellent summaries of the Army of 1995 (the end of Sullivan's tour as CSA) and 1999 (the end of Reimer's) give snapshots of the progress made during this critical period, showing how growth and change had been fostered in spite of downsizing and ongoing contingency operations.

GEN Shinseki recognized that Army deployments were receiving all of the attention and the Army was getting no credit for its transformation efforts. He set out to communicate an Army

message and introduced Army Transformation with a capital *T*. He laid out the concept of a legacy force, interim force and objective force, and introduced a pervasive graphic to illustrate this idea. Brown details how Shinseki then set about building the interim force with what began as a Stryker Brigade at what was then Fort Lewis, Wash., noting, "Doctrine and a vision of the future force preceded the actual hardware with which it was to be equipped."

The rapid progress with actual force development at Fort Lewis is contrasted with the rocky relationships in the Pentagon that came with Donald Rumsfeld's confirmation as Secretary of Defense. Brown asserts that Secretary Rumsfeld and his Director of Net Assessment, Andrew Marshall, saw transformation as "less of a program than an ideology: speed, flexibility, precision, 'leap-ahead' technology, and space-based assets. Ideologies are not necessarily right or wrong, but they are believed rather than proven."

Given all the analysis and testing that enlightened each step from theory to practice in Army Transformation, some conflict was inevitable. Brown notes that there had been tremendous Army leadership continuity from GEN Vuono through GEN Shinseki and that Secretary Rumsfeld deliberately aimed to disrupt that continuity when he chose GEN Peter Schoomaker to come out of retirement to become Chief of Staff in 2003.

He reminds us that the real change was to an Army at war, forcing a shift in the balance between current and future requirements. "The change in slides was far more dramatic than changes in funding or programs."

After carrying us through the dramatic shift that was imposed by the big "boots on the ground" requirements in Iraq, Brown then provides several thematic chapters covering the entire period under review. "Army Force Structure, 1989–2005" describes the debate over echelons of command, force mix and structure of capabilities. It is an excellent summary and a handy reference for those who think current arrangements are expedient, tailored to current warfighting requirements and subject to radical revision. We have never had an Army coming out of a war that did not inspire such beliefs.

Chapter 8, "The Army Family and Army Family Support, 1989–2005," tells the story of increased institutional awareness of the importance of the Army family and outlines some of the implications for families inherent in a continental U.S.-based deployable Army that is brigade-based and unit-manned.

Chapter 9, "The 'Transformed' Army in Action," addresses several pertinent questions to test whether the Army has been transformed: Can it deploy more quickly and effectively? Can it still fight war at the high end of the spectrum of conflict? Can it adapt to the requirements of unconventional warfare? Did investments for the high-intensity battlefield pay off at the low end? Was sustainability enhanced? Most answers are positive, and Brown characterizes the results as the "80 percent solution" that military realists often must accept.

Chapter 10 offers concluding thoughts. This is far more than an executive summary, especially for today's reader who knows that sharp reductions in supplementals with a declining defense budget will pose significant challenges for our Army. Will the digitized expeditionary Army mature or transform? Will a brigade-based, unit-manned Army have the flexibility and staying power that it may be called upon to demonstrate in future conflicts? Brown addresses these questions, noting that the Army needs to be "conceptually ready for all the contingencies it can foresee." He looks back over this period of change and asks whether the Army could conduct a centrally directed and institutionally driven transformation in the future. He sees the value of getting out in front on staff work, stacking the Quadrennial Defense Review and similar defense-wide deliberations with "top drawer" talent, ensuring consensus inside the Army while negotiating outside it, and sustaining the support of key outsiders.

Brown acknowledges the value of

Save Time and Register Online

- Go to **www.ausa.org** and click on the small Annual Meeting image or the Annual Meeting link
- Fill out the registration form and click "Submit"
- Print your confirmation with your personalized bar code
- Bring this with your government-issued photo ID to the Registration Desk to pick up your badge

See you there!

22-24 OCTOBER 2012 • WASHINGTON, D.C.

ASSOCIATION OF THE UNITED STATES ARMY
2425 Wilson Boulevard • Arlington, VA 22201
(703) 841-4300 • (800) 336-4570 • www.ausa.org

2012 AUSA
ANNUAL MEETING AND EXPOSITION
A Professional Development Forum

22-24 OCTOBER 2012 • WALTER E. WASHINGTON CONVENTION CENTER • WASHINGTON, D.C.

2012 ADVANCE TICKET ORDER FORM

Advance ticket orders available to members only

ORDERS MUST BE RECEIVED BY 28 SEPTEMBER 2012

Advance ticket purchases with badges will be held for pickup at the Ticket Pickup Counter of the Walter E. Washington Convention Center.
A government-issued photo identification will be required for pickup.

SPECIAL NOTE: SEPARATE TICKETS ARE REQUIRED FOR EACH FUNCTION.
BADGES AS WELL AS TICKETS ARE REQUIRED FOR ADMISSION TO ALL FUNCTIONS.

Function	Quantity	Price	Amount
Guard/Reserve Breakfast (22 Oct.)	_____	$40.00	_____
President's Reception (22 Oct.)	_____	$50.00	_____
Eisenhower Luncheon (23 Oct.)	_____	$60.00	_____
Army Civilians' Luncheon (24 Oct.)	_____	$50.00	_____
Marshall Memorial Reception (24 Oct.)	_____	$45.00	_____
Marshall Memorial Dinner (24 Oct.)	_____	$95.00	_____

Total Amount $ _____

Payment must accompany this order • Please print or type
No refunds for ticket orders cancelled after **28 SEPTEMBER 2012**
Cancellation in writing only

Americans with Disabilities Act (ADA): Check here ❑ if you need special arrangements.

AUSA MEMBERSHIP NUMBER

RANK	FIRST NAME	INITIAL	LAST NAME	PHONE NO.
UNIT, CHAPTER, OR TITLE/COMPANY, ETC.				
ADDRESS (REQUIRED)			STATE ZIP	COUNTRY
FAX			E-MAIL	
GUEST NAME – PLEASE ATTACH SEPARATE SHEET FOR ADDITIONAL GUESTS				

PAYMENT BY: ❑ CHECK ❑ VISA ❑ MASTERCARD ❑ AMEX

CARD EXPIRES MO. YR.

SIGNATURE _____

www.ausa.org

MAIL TO: Association of the United States Army
P.O. BOX 101560
Arlington, VA 22210-0860

FAX TO: 703-243-2589

AUSA on those last two points. If you have never been to an Annual Meeting, check out pages 194–196 to see how an Army Chief of Staff uses an Eisenhower luncheon, and note the importance of the Institute of Land Warfare (ILW) as a clearinghouse for Army-oriented publications and arguments. *Kevlar Legions* made its debut in an ILW session at the 2011 Annual Meeting. Everyone should be talking about it when we meet in 2012 and for years to come.

***BG Harold W. Nelson**, USA Ret., is a former U.S. Army Chief of Military History. He has served on the faculties of the U.S. Military Academy, the U.S. Army Command and General Staff College, and the U.S. Army War College.*

A History of Deaths in Land Warfare

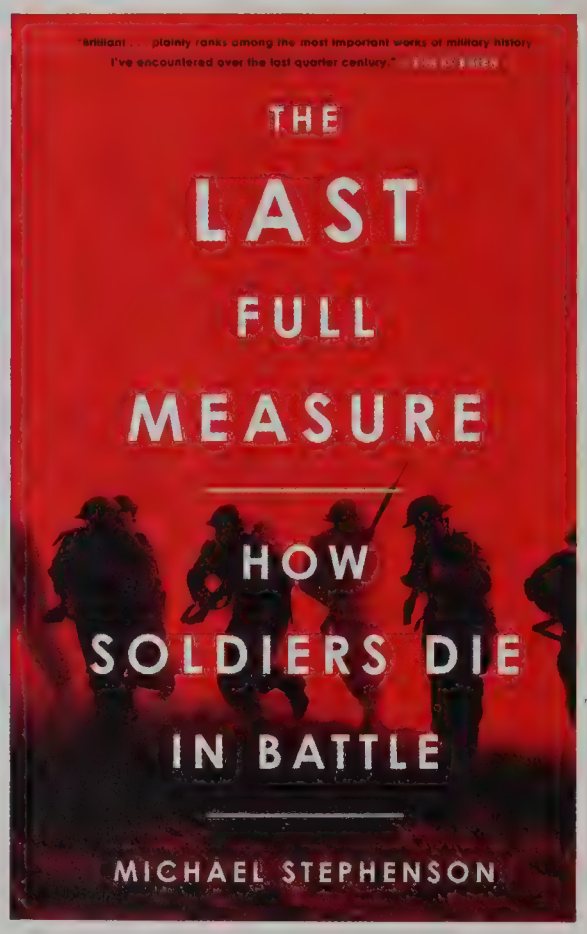
The Last Full Measure: How Soldiers Die in Battle. *Michael Stephenson. Crown. 480 pages; index; appendix; $28. Publisher's website: www.randomhouse.com/crown.*

By LTC Michael Burke
U.S. Army retired

As the United States finishes with one war and begins withdrawing from a second, it may or may not be a good time to publish a historical survey of how men die in battle. Given the relatively small number of people who have been directly affected by the wars in Afghanistan and Iraq, however, perhaps we need reminding of just how intimately war and death are bound together. Michael Stephenson, former editor of the Military Book Club and student of battles across history, offers an encyclopedic synthesis of the deaths of others from the prehistoric to the almost-contemporary battlefield. His focus is solely on death in land combat, which, while limiting in some ways, lets him concentrate where most combat deaths occur. He also relies only on the written experiences of others—soldiers, historians, memoirists, commentators—because, like almost all Americans, he has no direct war experience of his own.

Many other writers have offered readers similar surveys over the years, with John Keegan's *The Face of Battle: A Study of Agincourt, Waterloo, and the Somme* and Victor Davis Hanson's *Carnage and Culture: Landmark Battles in the Rise of Western Power*, coming to mind. Both are also the works of scholars without direct combat experience. Stephenson quotes both books and includes the well-known memoirs of Lord Moran (*The Anatomy of Courage*), Guy Sajer (*The Forgotten Soldier*) and many other figures from across the history of land warfare. Being necessarily derivative, then, why bother with it?

The answer lies in Stephenson's ability to synthesize his many sources into a coherent narrative, one that avoids two pitfalls: the extreme particularity of



individual experience and the sweeping generalizations of distant historians. He uses diary entries, memoirs, summaries of historical events, and long and short views of human conflict and experience to create a coherent whole that meets his one overriding concern: expressing the utter misery associated with death on the battlefield. He robs it of glory, showing readers without embellishment exactly what happens when men fight wars: They die in large numbers and small, killed by weapons used close up or from far away. Sometimes they see their killers; most often they do not. Some die quickly, others slowly. A few are killed by—in the words of that most grotesque of euphemisms—"friendly fire."

The chapters grow longer and more detailed as the written experiences of soldiers grow from reliance on hard-to-verify Greek and Roman historians to the explicit, detailed analyses written during and about 19th- and 20th-century wars. In his chapter on World War II, Stephenson points out who is reliable and who is not, criticizing S.L.A. Marshall and Stephen E. Ambrose for sloppy work. He prefers the memoirs and diaries of the veterans themselves, men like E.B. Sledge, William Manchester and even Paul Fussell.

Stephenson makes connections across time, pointing out similarities between infantrymen and artillerists of all times, paratroopers and medieval knights, and the like. He points out, too, that different classes of soldiers in armies sometimes have divergent interests: Medieval pikemen, for example, would kill enemy knights to loot the corpses, while knights preferred to take their opponents alive in order to ransom them back to their families.

As part of this discussion, he devotes a great deal of space to changes in weapons technology and their impact on the business of killing. His chapter on prehistoric warfare is the first cogent discussion I have read of how the atlatl, a kind of launching tool for a short spear, revolutionized Stone Age warfare by adding some distance between target and shooter. It nicely sets up his discussions of bows and arrows, crossbows, swords, lances, gunpowder and other kinds of transformative technology on the battlefield. We learn, for example, that the English longbow was superior to the crossbow for some kinds of battles but not others, that ar-

nor was as much of a hindrance as a ›oon to mounted knights, and that ar- illery started off as a kind of deterrent nore than a direct threat—but which n modern war became the largest ciller on the battlefield. The bayonet reates a long discussion on late mod- rn (18th–20th century) combat, and Stephenson concludes that its value is lmost purely psychological.

Stephenson limits his discussion of echnology, however, to exclude con- emporary weapons like the impro- ised explosive device or drone, just as ıe rushes through combat from the end f World War II to today's Afghan and raq wars, consigning all this to a short ast chapter. This seems to reflect how imilar he feels today's battlefield is to s predecessors in terms of death, but I would argue that insurgency and our high-tech responses to it present a vastly different experience for both sides. Perhaps the relative paucity of memoirs from our most recent wars, or the difficulty of discussing a battlefield while many of the participants are still alive, forces his decision. We need some kind of intellectual atlatl to fully comprehend the wars we fight now, and the time, Stephenson seems to say, has not yet come.

In an appendix, he provides a brief but fascinating history of battlefield medicine, pointing out that only recently have soldiers had any real expectation of surviving medical treatment. Advances in evacuation, anesthetics and, most of all, hygiene account for enormous improvements in survival, a lone hopeful note in a book that by necessity must depict almost unmitigated horror.

The Last Full Measure is well-written, insightful and compelling, but it is ultimately depressing because of who will—or will not—read it. Military historians know his sources, by and large; soldiers know the experiences he describes; young people may be appalled yet fascinated by the graphic descriptions of death; policy makers, sadly, will probably not pick it up. For the dead, there is probably no such thing as a "good" war.

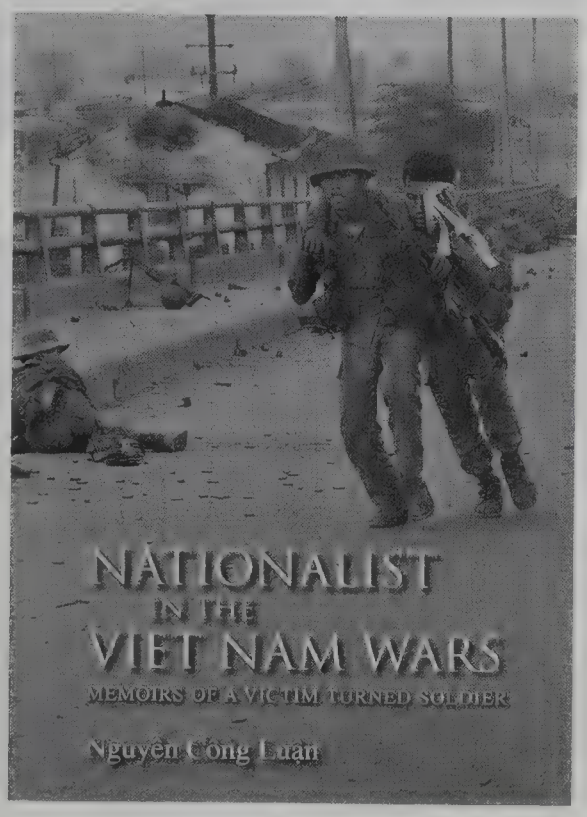
***LTC Michael Burke**, USA Ret., taught English at the U.S. Military Academy for eight years. He served with the 1st Armored Division during the Persian Gulf War.*

A Vietnamese Perspective

Nationalist in the Viet Nam Wars: Memoirs of a Victim Turned Soldier. *Nguyen Cong Luan. Indiana University Press. 598 pages; notes; index; $39.95. Publisher's website:www.iupress.indiana.edu.*

By COL Gregory Fontenot
U.S. Army retired

Although the American war in Vietnam ended nearly 40 years ago, what happened there remains shrouded in myth generated by such deep-seated ideological biases that what really happened is, as of yet, unknown. Not only it difficult to get beyond "revealed uth" delivered like religious liturgy, ıt American scholarship is also oblivıus to how the people who lived in ietnam—or anyone who lived in the gion, for that matter—might view ıe several different wars fought on at unfortunate peninsula. Practically nce the boomer generation discoved placards, the United States has ›en absorbed with the idea that the ar in Vietnam was about America. It was not about America or the Stunts for a Democratic Society or the vil rights movement or the various eins of Occidentalism now prevant in American scholarship. The war—or, more accurately, the wars—in Vietnam stemmed from historical events prominently featuring Chinese, Japanese and French imperial ventures coupled with competing political philosophies imported from Europe. Nguyen Cong Luan's *Nationalist in the Viet Nam Wars: Memoirs of a Victim Turned Soldier* is a first-rate contribution to correcting the record. Readers who approach Luan with their hackles well down will find a new and refreshing view of what happened in Vietnam from the end of World War II through 1975. The author's work is refreshing because there is far too little published in the United States about Vietnam from the perspective of the Vietnamese. Gaining this perspective is of enormous value not only to soldiers but frankly to the average American as well. Revising or altering revealed truths about Vietnam could reduce the American propensity to erroneously compare Vietnam to almost everything that has happened since. The wars in Iraq and Afghanistan are not like those in Vietnam.



Born in the north in 1937, Luan saw the wars in Vietnam as a child, a serving soldier, a political prisoner, and finally a man with enough time on his hands to consider more fully the implications of his experience and that of his country. His account is both riveting and thoughtful, drawing insights with surprising objectivity given his personal history.

Luan begins his narrative by recounting, in compelling detail, a harrowing experience he had at the hands of French Colonial African troops. Early one morning in the summer of 1951, African troops serving in the French colonial army, in search of Viet Minh guerrillas, swept the village where he

was visiting his grandmother. These troops, or any French troops really, "could do almost anything [they] wanted to a Vietnamese civilian without fear of being tried in a court or punished by [their] superiors." That morning Luan barely survived an encounter with an enraged French colonial thanks to the intervention of a sergeant who stopped the attempted murder after Luan's nemesis had already fired and missed him.

As good a book as this is, the first few chapters are disorienting. Luan's style is fast-paced in describing events in a complex environment extending from before World War II. There are surreal moments, such as when he describes the Japanese occupation. Curiously, when the Japanese took over from the Vichy in March 1945, little changed in terms of what life was like under the French before the war and the Vichy French during the war. The French, the Japanese and the Chinese all played competing roles before, during and after the war. Thus from the author's viewpoint, change was the only constant in his life—that and bloody civil war.

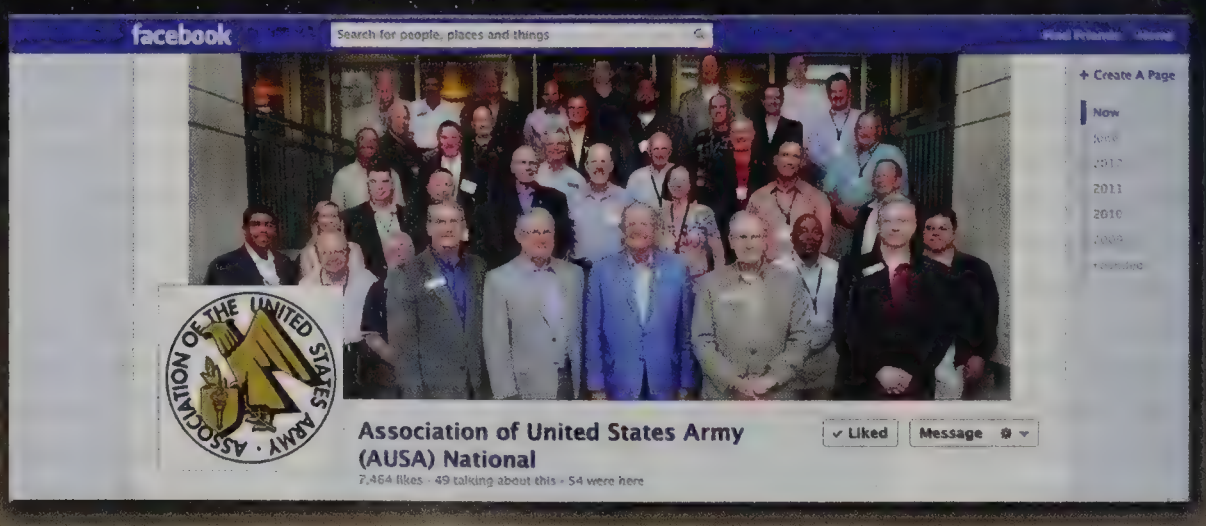
Fundamentally, Luan describes the path that he chose among the two main trails available to Vietnamese: nationalism and communism. He chose nationalism, opposing the French from the perspective of independence. To that end he and others of his stripe occasionally collaborated with their communist countrymen but seemed always to be at a disadvantage ideologically. For Luan and those who thought as he did, a Vietnamese society should be based generally on democratic principles not unlike those the French enjoyed. The nationalists shared no particular ideology; not so the communists.

The bulk of the narrative takes Luan from his days as a cadet in the army of the Republic of Vietnam through his incarceration by the North Vietnamese from 1975 to 1982. He does well telling the story of the various Vietnam wars as he saw them. Although he had only reached the rank of major by the time the T-54s drove onto the presidential compound in 1975, he held important posts in the defense establishment. He served as director of the largest directorate in the Chieu Hoi Ministry where communists who came back to the fold were processed and reintegrated into society. At the very end, he also served as chief of research in the General Political Warfare Department within what amounted to the South Vietnamese joint staff.

In April 1975, as South Vietnam collapsed, Luan chose to return home from Fort Benning, Ga., after becoming a distinguished graduate of the Infantry Officer Advanced Course. Less than a month later, the short difficult life of the republic in the south ended. Not quite three months later, he went off for more than seven years of "reeducation."

This is a poignant history of the several wars involving the Vietnamese against the French, against each other and with and/or against the Americans. Luan will please few

AUSA is on Facebook



Association of the United States Army (AUSA) National

Go to the AUSA website: www.ausa.org

Click on Find us on Facebook at the bottom of the page.

If you have a Facebook page, become an AUSA "friend."

To become a friend, you must have a Facebook account.

who accept the point of view of the various protagonists. He is thoughtfully critical of the Americans, the French, his own government, his enemies and himself. What emerges is a man of genuine integrity who richly deserves to have his story read. This is a first-rate book with perhaps a single downside: It is not a book for someone who has never read anything about Vietnam. It is, however, an essential read for those who seek to understand the complex tragedy of the wars of Vietnam.

***COL Gregory Fontenot**, USA Ret., commanded a tank battalion in Operation Desert Storm and an armor brigade in Bosnia. A former director of the School of Advanced Military Studies, he is coauthor of* On Point: The U.S. Army in Operation Iraqi Freedom *and is director of the University of Foreign Military and Cultural Studies.*

Evolution of an Institution

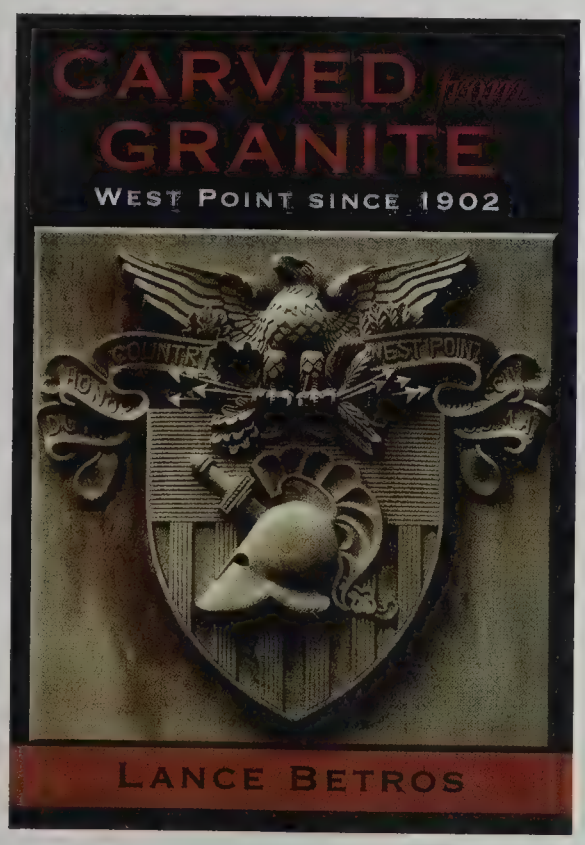
Carved from Granite: West Point Since 1902. *Lance Betros. Texas A&M University Press. 458 pages; black-and-white photographs; index; appendices; notes; $40. Publisher's website: www.tamupress.com.*

By LTC Frederick H. Black Jr.

The United States Military Academy is a national treasure that holds a special place in the hearts of many graduates and non-graduates alike. Hundreds of books examine West Point from any number of angles or aspects. Lance Betros has added to that list with *Carved from Granite: West Point Since 1902*, but in a very different way than most previous works. This is not a coffee table book, and it is not a book cheerleading for West Point. It is an in-depth thematic study and a well-researched history with more than 100 pages of endnotes. Most important, Betros uses historical analysis to recommend changes necessary for West Point if it is to maintain its prestigious position. In doing so, he frankly addresses a full range of historical and contemporary issues, and he does not gloss over the rough spots. His thesis is that despite common beliefs to the contrary, change, not continuity, best characterizes West Point since 1902.

Each of the first seven chapters focuses on a specific theme: governance, admissions, academics, military training, physical program, leader development and character building. Each chapter follows a similar format, starting with the status of the situation as it existed in 1902 and then tracing changes to the present. Occasional redundancies may seem distracting, but they actually work well by increasing emphasis on certain topics.

The examination of governance boils down to the struggle between the academic board, composed of long-serving academic department heads (including Betros, chair of the history department), superintendents and a rotating general officer. This conflict ebbed and flowed until 1977, after both the Borman Commission and the West Point Study Group recommended a stronger role for the superintendent and making the academic board advisory. Betros advocates for a more cooperative role between the academic board and the superintendent as the only way to succeed. Some discussion of the requirement for superintendents to retire from the Army after a five-year term would have added significantly to the analysis. While intended to remove the pressure of bucking for promotion or future assignment from the decision-making process, this move may have also degraded the relevance of superintendents within the larger Army.



Over the years, admission to the academy shifted from a patently political system in 1902 to the whole candidate approach used today. Betros critiques the current policies of admitting underqualified athletes and underrepresented minority groups. Despite strong empirical evidence, the analysis lacks a stronger explanation of the distinction between "fully qualified" and "best qualified." For example, a class composed of the 1,200 best-qualified applicants would lack more than just minorities and athletes. It would also lack a national character because such a system would skew towards admitting more cadets from larger and better-quality school systems. The present system ensures the desired national representation.

A graduate of just 40 years ago would not recognize the vastly different academic program that current cadets experience. Similarities exist, but the overall structure of the program and choices left to the cadets in terms of academic majors and electives make a much stronger program, tailored to cadets' interests and aptitudes. Some of these changes originated with the academic board, while others came from either superintendents or other outside influences for a variety of reasons. Betros proves, beyond a shadow of doubt, that the changes have had an overwhelmingly positive effect.

Athletics and physical education are concepts closely associated with the overall West Point experience. Betros levels his strongest criticisms at the direction in which the Academy has moved over the last several decades in intercollegiate athletics, espe-

cially the resources and the concessions made in the admissions and academic processes. Despite the strong factual evidence to support the argument, however, it lacks some necessary context. At several other points in the text, Betros justifies decisions or changes because they followed the trends of most other U.S. colleges and universities. The growing influence of athletics on college campuses easily fits that mold, but it never enters the discussion. In addition, while Betros mentions the influence of alumni and donors to the athletic program, he never addresses the huge institutional influence of the Association of Graduates, the fundraising apparatus.

Military training at the Academy has proven surprisingly controversial over the years. The struggle hinges on the purpose of pre-commissioning military training and how much of it to conduct during the academic year versus the summer months. Any addition to the schedule generally requires a corresponding deletion, again pitting various segments of the academy governance against one another. Regardless of opinion on how to solve the problem, current cadets clearly receive a significant amount of training over 47 months and far more than four-year ROTC scholarship cadets.

The leader development and character development pillars of the framework also show significant differences of opinion, both across different eras and among academics and non-academics. Early 20th-century cadets gained leadership experience largely by osmosis, with limited practical experiences in their senior year. The same held true for character development. The Academy employed an attritional model in which those found lacking in these aspects were typically separated from the Academy at the earliest opportunity. The current developmental model provides practical experiences more distributed across the entire time at West Point, along with opportunities to correct deficiencies instead of separation.

On the whole, Betros has produced an excellent work of scholarly research and analysis. Anyone involved in post-secondary education will benefit from this book, with West Point serving as the case study. Leaders of military colleges will benefit even more as the unique challenges of operating a college within a military environment receive excellent coverage. Lance Betros has also provided an excellent opportunity for anyone who professes a love for West Point to learn far more about the Academy than he or she probably ever thought possible.

LTC Frederick H. Black Jr. *is currently a professor at the U.S. Naval War College. He graduated from the United States Military Academy in 1994 and holds a master's degree and a Ph.D. in history from Florida State University.*

1-800-336-4570

That's the toll-free number to call AUSA national headquarters. The AUSA Action Line is open 8:30–5:00, Monday through Friday, except holidays. If you have a question about AUSA, give us a call.

PUBLICATIONS
from the Institute of Land Warfare

Defense Reports
- DR 11-4 – Unleashing Unlimited Potential: The Army Warrior Care and Transition Program in 2011 (October 2011)[1]

Landpower Essays
- LPE 11-2 – Laying the Groundwork for the Army of 2020 by General Robert W. Cone (August 2011)[1]

Land Warfare Papers
- LWP 89 – Distilling the Demographic Dividend: Retaining U.S. Army Officer Talent for the 40-year Career? by Lieutenant Colonel Kevin D. Stringer (June 2012)[1]
- LWP 88W – The Spider Webs and the Lion: How Energy and Environmental Issues Entangle China by Colonel Mark Lee (May 2012)[2]
- LWP 87 – Historical Lessons Applied to the Current Technical Revolution in Military Affairs by Major Benjamin Huebschman (March 2012)[1]
- LWP 86 – Applying Natural System Metaphors to the Force Modernization Process by Colonel K. Todd Chamberlain (February 2012)[1]

National Security Watch
- NSW 12-2 – The Rationale for a Robust U.S. Army Presence in the Pacific Basin by Nicholas Krueger (March 2012)[1]

- NSW 12-1W – Thinking About the 21st Century Security Environment: The Need for a Whole-of-Government Approach by General Gordon R. Sullivan, USA Ret. (January 2012)[2]

NCO Update
- Summer Brings Free Passes and Special Deals to Servicemembers[3] (3rd Quarter 2012)[1]
- Budget Cuts Affect NCOs' Reenlistment Opportunities[3] (2nd Quarter 2012)[1]
- Tax Credits to Benefit Veterans Signed into Law[3] (1st Quarter 2012)[1]
- Three NCO Leaders Honored with Strickland Award[3] (4th Quarter 2011)[1]

Special Reports
- AUSA + 1st Session, 112th Congress = Some Good News (January 2012)[1]
- Fiscal Year 2012 Army Budget – An Analysis (October 2011)[1]
- Profile of the U.S. Army 2010: a reference handbook (July 2010)[1]
- Your Soldier, Your Army: A Parents' Guide by Vicki Cody (also available in Spanish)[1]

Torchbearer National Security Reports
- A New Equipping Strategy: Modernizing the U.S. Army of 2020 (June 2012)[1]
- Modernizing LandWarNet: Empowering America's Army (May 2012)[1]
- U.S. Army Space Capabilities: Enabling the Force of Decisive Action (May 2012)[1]

Torchbearer Issue Papers
- First Army: Training for Today's Requirements and Tomorrow's Contingencies (April 2012)[1]
- Third Army: Empowering Theater Responsiveness by Synchronizing Operational Maneuver (March 2012)[1]
- U.S. Army North/Fifth Army: Building Relationships for a Secure Homeland (December 2011)[1]
- The U.S. Army in Europe: A Pillar of America's Defense Strategy (December 2011)[1]

Torchbearer Alerts
- Breaking the Faith (February 2012)[1]
- U.S. Army Retirees: Retired Pay and Health Care at Risk (September 2011)[1]

All publications are available free of charge at:
www.ausa.org/publications/ilw

To order these and other ILW publications, visit the Institute of Land Warfare at the AUSA website (www.ausa.org); send an e-mail to **ILWPublications@ausa.org**; call (800) 336-4570, ext. 4630; or write to AUSA's Institute of Land Warfare, ATTN: Publication Requests, 2425 Wilson Boulevard, Arlington, VA 22201-3326.

[1] Available on AUSA website at www.ausa.org/ilw.
[2] Available ONLY on AUSA website at www.ausa.org/ilw.
[3] Lead story.
[4] Winner of the 2011 AUSA/Army Capabilities Integration Center (ARCIC) writing contest

Historically Speaking

What If We Go Below 400K, Again?

By BG John S. Brown
U.S. Army retired

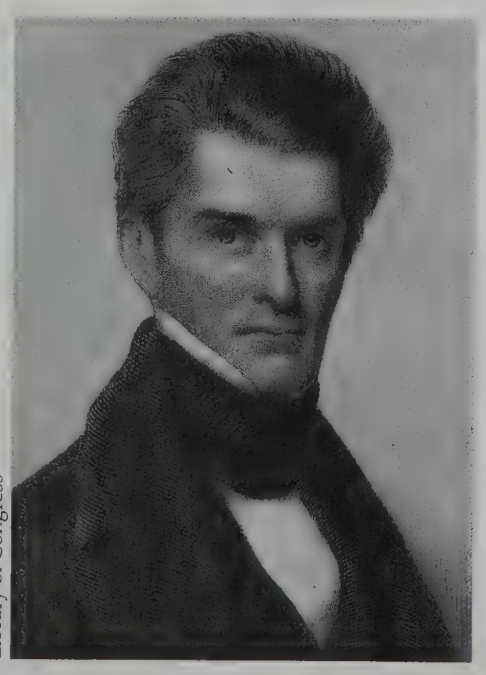
It is hard to escape a premonition that Army personnel cuts beyond those already programmed are coming. As I write, $600 billion more will automatically come out of the national security budget over a 10-year period beginning January 2 if some other resolution to our recent Budget Control Act is not negotiated. What is worse, the struggle embodied in this sequestration is hardly likely to be our last brush with penny pinching and austerity. More than one pundit foresees the active Army dropping under 400,000. If so, this would be the smallest it has ever been since before World War II—a period rightly infamous for American unpreparedness. Indeed, as a percentage of the U.S. population, a 400,000-soldier Army in 2012 would be on par with the starveling Army of 140,000 during the Great Depression. How does our paradigm change if we become so small?

From World War II through Desert Storm, the Army was insulated from the worst excesses of its traditional boom-and-bust cycles by the requirements of the Cold War. Prior to World War II, our Army was routinely ravaged by post-war downsizing and budget cuts. Isolated from European quarrels, reliant upon a militia tradition and interested in other priorities, the American people and their elected representatives saw little reason to sustain a robust Army in times of peace. The regular units that were there served in scattered frontier outposts or, later, in distant overseas stations. American leaders nevertheless anticipated the need for wartime expansion and developed two broad approaches for achieving it.

The expansible principle was introduced by Secretary of War John C. Calhoun in the 1820s and later championed by such thinkers as Emory Upton and Elihu Root. Peacetime units would be about half of wartime strength. They would be somewhat skeletal and top-heavy with respect to rank but nevertheless capable of doctrinal missions even if unreinforced. In wartime they would double in size by absorbing and training privates before marching off at full strength. The highly professional and well-led peacetime formations would be ideal for constabulary duty and other low-casualty situations, and the reinforced wartime formations would be able to withstand the punishment of high-intensity combat. The expansible principle showed well in the Mexican War (1846–1848) and again in the Spanish-American War (1898). The expansible principle implied amoeba-like growth through doubling, however, and proved inadequate when wartime demands dwarfed the peacetime Army by multiples greater than two.

The American Civil War saw the active Army erupt from 16,000 to more than one million at a pace the expansible principle was totally incapable of accommodating. Instead, militia and volunteers swarmed to the colors to be organized and trained by smatterings of experienced soldiers who happened to be among them. The process was state-based, ill-organized and unevenly served by wildly disparate qualities of unit leadership. The results were such appalling bloodbaths as the battles of Bull Run, Shiloh and Antietam before combat experience and more relevant training reduced the mayhem somewhat. Throughout the war, poorly trained new units were thrown into their first battles with predictable results. In the aftermath of the Civil War, such military leaders as John A. Logan, Leonard Wood and John McAuley Palmer advanced the notion of cadre-based mobilization. In their view, small but capable cadres could adequately organize and train much larger masses of citizen soldiers into capable units. Wood advocated a period of six months. After the extraordinary mobilization experience of World War I, this span evolved into the 12 months of the methodical Army training program of World War II.

Perhaps America's most remarkable military achievement, the mobilization for World War II, was a hybrid of expansible and cadre principles. Regular Army divisions, skeletal between the wars, filled out with new recruits, trained up and deployed overseas. National Guard divi-


Library of Congress

Library of Congress

Far left, in the 1820s Secretary of War John C. Calhoun introduced the expansible principle, which was later championed by (right) MG Emory Upton.

sions similarly benefited from pre-war organization and training and achieved preparedness close behind. Perturbations did occur when some units were stripped to provide manpower for others. After the rigors of the Army training program, a great mass of cadre-led "draftee divisions" (Army of the United States) flowed overseas. The first of these into combat, the 88th Infantry Division, took over a combat sector in March 1944. In May, it made a superb showing in the assault that ultimately liberated Rome in June. Soon, other draftee divisions further validated the theory of cadre-based mobilization. It had taken time, however, time bought by allies, regulars and the National Guard bearing the brunt until training and deployment were complete.

As the Soviet Bloc—and with it the Cold War—disintegrated, then-Army Chief of Staff GEN Carl E. Vuono anticipated the imminent downsizing of the Army. After considerable study and deliberation, the Army by and large stepped away from either the expansible or the cadre-based paradigms of earlier downsizings. Correctly surmising that the next two decades would see recurrent contingencies on short notice but no major requirements for national mobilization, Vuono and his successors opted for an ever-ready Army. Adopting a 9/11 mantra, units throughout the Army uniformly held themselves to high standards of readiness and expectations of deployment. The recurrent rotations of the Global War on Terrorism reinforced notions that there was no "second string." The National Guard initially served as a hedge against mobilization but over the course of our longest war has been subsumed into the operational force. The units we put in the field are easily the best trained, best equipped and most capable in the world. Their tables of organization are not compatible with expansibility, however, and mechanisms for cadre-based mobilization that stretched from World War I through the Cold War are largely moribund.

There are no American precedents for our current situation. The British Army before World War I may offer a historical parallel. Charged with policing an empire, it was well-trained, well-equipped, experienced and capable. Its battalions were arguably the best in the world. Its regiments, however, were too tribal to be readily expansible, and the British had neither conscription nor effective mechanisms for mass mobilization. In the opening weeks of World War I the "Old Contemptibles" readily outclassed everything the Germans threw against them, but ultimately they numbered too few. In a rush to field an army large enough to matter, the British introduced conscription and churned out so-called Kitchener battalions of hastily trained soldiers. Results were predictable in the bloodbath of the Battle of the Somme. Americans arriving a year or so later avoided this mistake, largely because the British and French held the line until our forces could be adequately trained.

Downsizing below 400,000 would change the paradigm for our ever-ready Army. At some point reversibility, being prepared to efficiently regain a size sufficient for emerging circumstances, will have to trump immediate readiness. The problem will be more acute if we are likely to encounter an adversary capable of inflicting significant casualties on us—which has not been our recent experience. There is a minimum size to which training and logistical and administrative establishments can shrink and remain viable, and executive agency imposes further force structure on us. Thus further cuts are likely to affect combat units disproportionately. This, in turn, would make reversibility even more of an imperative. How is it to be achieved? Our ancestors might suggest relevant questions: Can units be organized to be capable of doctrinal missions yet expansible in time of crisis? Should we tier our mobilization base? How quickly can we create effective new units from whole cloth? What will it take to do so? How many combat-capable brigades can we have in a month? Six months? A year? Who can contain a crisis while we are generating the forces necessary to reverse it?

Being undermanned, underfunded and incapable of rapidly deploying large forces is not a good thing. It is far worse to be in such a condition without having thought it through. The last time the Army was in a huge funk about downsizing and plummeting budgets, then-Chief of Staff GEN Gordon R. Sullivan initiated the institution-wide brainstorming of the modern Louisiana Maneuvers to get beyond the hand-wringing and into thoughtful deliberations on the way ahead. The results were transformative: absorbing the losses, improving the standards, embracing cutting-edge technologies and designing the digitized expeditionary Army of today. The time may soon come for another such enterprise. ★

***BG John S. Brown**, USA Ret., was chief of military history at the U.S. Army Center of Military History from December 1998 to October 2005. He commanded the 2nd Battalion, 66th Armor, in Iraq and Kuwait during the Gulf War and returned to Kuwait as commander of the 2nd Brigade, 1st Cavalry Division, in 1995. He has a doctorate in history from Indiana University. His book,* Kevlar Legions: The Transformation of the U.S. Army, 1989–2005, *was published in 2011.*

Recommended Reading:

Brown, John S., *Draftee Division: The 88th Infantry Division in World War II* (Lexington, Ky.: The University Press of Kentucky, 1986)

Brown, John S., *Kevlar Legions: The Transformation of the U.S. Army, 1989–2005* (Washington, D.C.: Center of Military History, 2011)

Stewart, Richard W., *American Military History, Vol. 2: The United States Army in a Global Era, 1917–2008* (Washington D.C.: Center of Military History, 2009)

Weigley, Russell F., *History of the United States Army* (New York: Macmillan Publishing Company, 1967)

Association of the United States Army's

USA Pavilion

at DSEI 2013

10-13 September 2013

London, England

For exhibit space sales, contact
Amy Frankenstein at 703/841-4300 x 2413
or intlprogram@ausa.org.

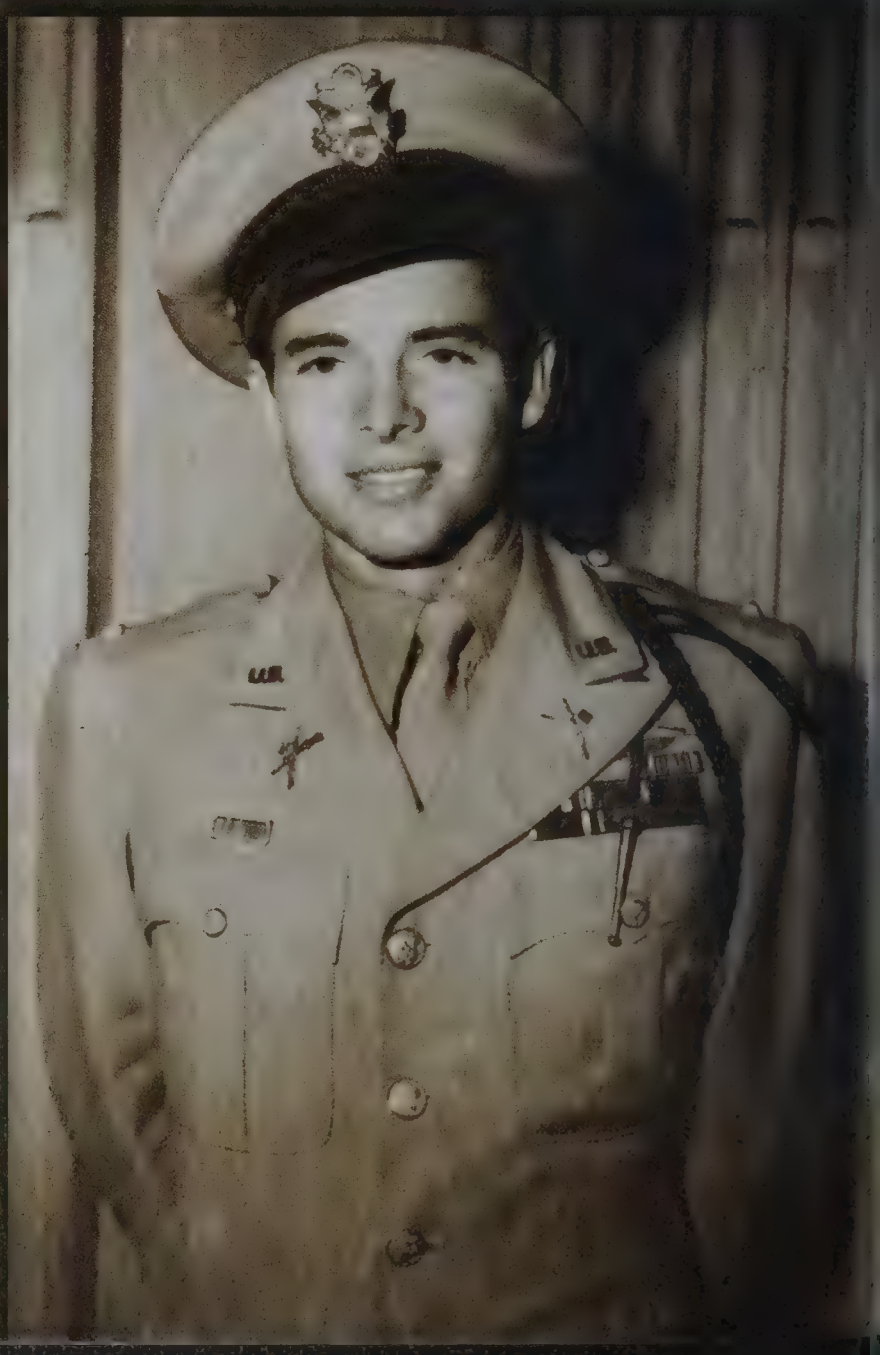
www.ausa.org

U.S. COMMERCIAL SERVICE
United States of America
Department of Commerce

DSEI
ExCeL, London www.dsei.co.uk

SGT Audie Murphy Club members from across the country gathered at the grave of America's most decorated World War II soldier June 20 for a wreath-laying ceremony at Arlington National Cemetery, Arlington, Va., on what would have been the Medal of Honor recipient's 88th birthday.

Since 1986, the SGT Audie Murphy Club has honored noncommissioned officers who have acted in a manner consistent with the actions of the Medal of Honor recipient. The club was established 26 years ago at the III Corps headquarters, Fort Hood, Texas. It has since spread to Army units around the world. Candidates are nominated, then screened to determine their leadership ability, training accomplishments and how they care for soldiers while living up to Army values, the Warrior Ethos and the NCO Creed.

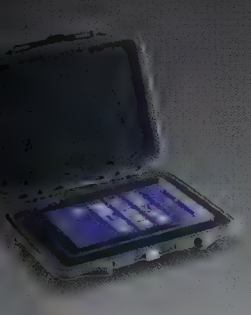


PELICAN

DIGITAL SURVIVAL

ntroducing the New Pelican
lardBack™ Case Series

Watertight | Dustproof | Crushproof



1055cc Case

Fits
- Kindle Fire™
- 7" tablets
- eBook readers
- Blackberry Playbook

1065cc Case

Fits
- iPad® 1, iPad® 2, iPad® (3rd generation) with or without Smart Cover
- 10" tablets

i1075 Case

Fits
- iPad®1,2, and 3 with cords, power brick and keyboard
- Netbooks
- 10.1" tablets

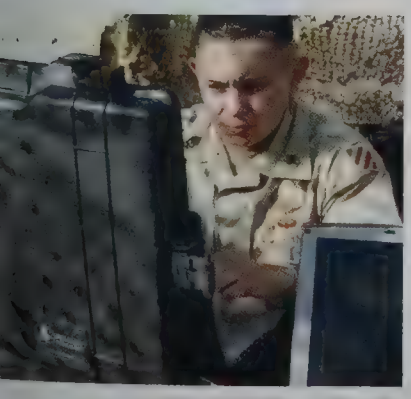
1085cc Case

Fits
- 14" Laptops

1095cc Case

Fits
- 15.6" Laptops
- 17" Macbook Pro®

Case contents not included.



Extreme Protection for Extreme Conditions

Pelican Hardback™ Case Series: 5 new cases to keep your digital assets safe. Known worldwide as the leader in asset protection, Pelican™ cases keep million dollar unmanned aerial vehicles operational and custom 3D camera lenses dry. Our new Hardback™ case series offers the same level of protection for your laptop, netbook or iPad®. Count on our watertight, dustproof and crushproof cases to cover your digital assets when all hell breaks loose.

PELICAN™

www.pelican.com/am

Pelican Products, Inc. 23215 Early Avenue, Torrance, CA 90505
866.291.8029 (TOLL FREE) Tel 310.326.4700 • Fax 310.326.3311

All trademarks are registered and/or unregistered trademarks of Pelican Products, Inc., its subsidiaries and/or affiliates

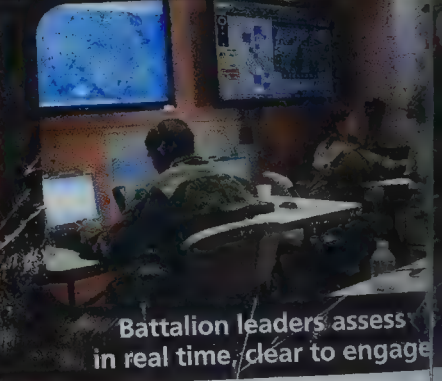
Delivering the network.

Introducing the Harris AN/PRC-152A. Keeping the frontline connected.

Dismounted troops send data with secure wideband

Squad leaders network up and down the command chain

Company commanders connect on the move



Battalion leaders assess in real time, clear to engage

The world's first handheld radio with both Type-1 wideband networking and narrowband interoperability. The NSA-certified Harris AN/PRC-152A gives today's warfighters secure access to voice, video, and data. Learn how Harris delivers the network to all echelons of the battlefield at Harris.com/Delivers

harris.com

HARRIS

assuredcommunications

The Magazine of the Association of the United States Army

ARMY

Education Periodicals
355.05 UNC
v. 62, no. 9 (2012)
A

September 2012 www.ausa.org $3.00

ANNUAL MEETING SUPPLEMENT INSIDE

**********AUTO**ALL FOR ADC 604
11639 20130531 20120901
ACQUISITIONS DEPT.C03373593 0001
ACQUISITIONS DEPT.C03373593 001579
1408 W GREGORY DR P00001
URBANA IL 61801-3607 01:022126

THE 21ST CENTURY KIOWA WARRIOR
FOR THE 21ST CENTURY SCOUT

Building on unprecedented performance, the Bell OH-58 Block II is the definitive solution for the 21st Century Scout. Netting billions of dollars in taxpayer savings, the Block II solution allows both industry and the Army the resources needed to invest in future S&T projects like FVL. Flying high/hot at max gross weight, the Bell OH-58 Block II is the fastest-fielding, lowest-cost solution available. The Bell OH-58 Block II. American ingenuity for America's soldiers. *On a Mission.*

- 6k/95 Performance at Max Gross Weight
- 800,000+ Combat Flight Hours by the Kiowa Warrior
- Highest OPTEMPO and Readiness Rates by the Kiowa Warrior
- Fielded Level II MUM-O

Bell Helicopter
A Textron Compar

www.ScoutsOut.c

© 2012 Bell Helicopter Textron Inc.

1-800-FLY-BELL | bellhelicopter.com |

ARMY

MAGAZINE

SEPTEMBER 2012
VOL. 62, NO.9

PUBLISHED BY THE ASSOCIATION OF THE U.S. ARMY

www.ausa.org

FRONT & CENTER

Hot Topics
By GEN Frederick J. Kroesen, USA Ret.
Page 20

Mission Command and Army Training Doctrine
By LTG James M. Dubik, USA Ret.
Page 22

A Welcome Return to the Guam Doctrine
By Richard Hart Sinnreich
Page 26

Riot Control 101
By MG Guy S. Meloy, USA Ret.
Page 28

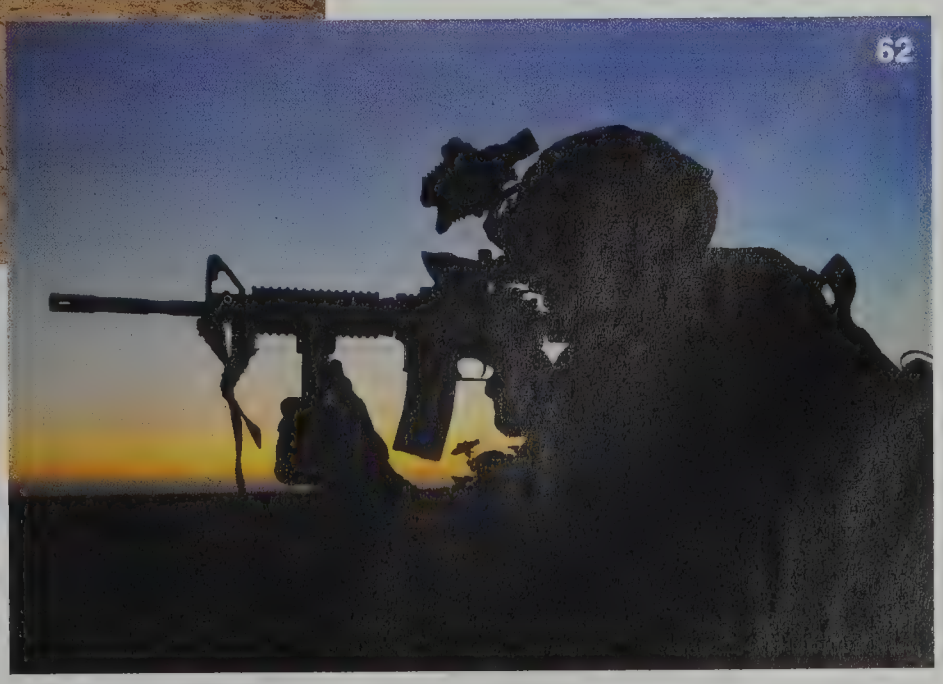
FEATURES

Boots on the Ground: Vital in Peacetime, Too
By Dennis Steele
Saber Strike 2012, one of U.S. Army Europe's premier multinational training exercises, built rapport and trust among NATO allies.
Page 32

32

58

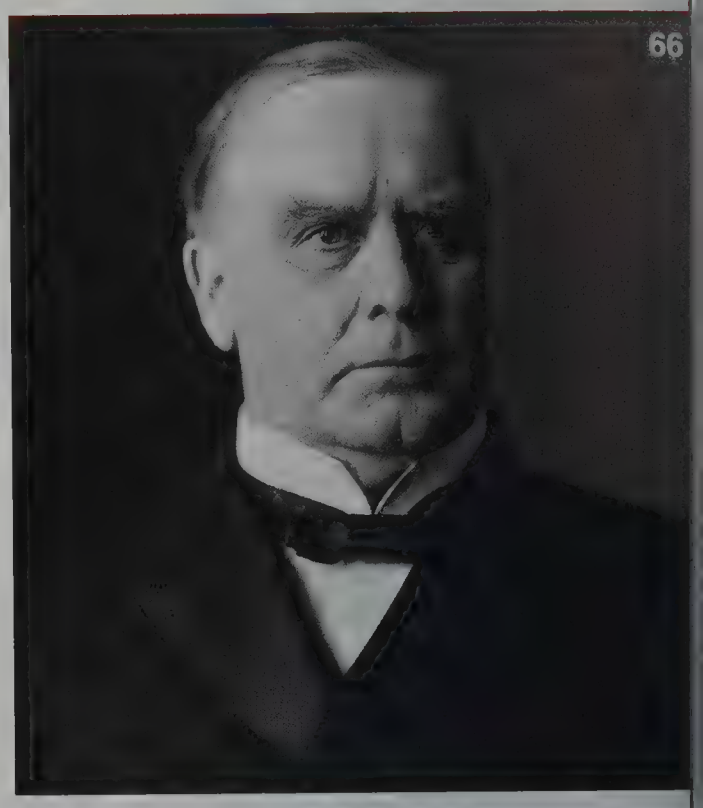
Investing in the Warfighter of 2020
By Daniel Goure
As it draws down in Afghanistan, the Army must apply lessons learned over the past 10 years and partner with industry to develop an investment plan that ensures soldiers are rapidly and fully equipped for the future.
Page 58


62

Mission Command Battle Lab Examines Transforming the Force
By Calvin S. Johnson and Carl E. Fischer
The Battle Lab leads and supports the Army Capabilities Integration Center's experimentation plan to build a lighter, more lethal and responsive Army.
Page 62

ARMY CONTENTS

William McKinley: The Veteran's President
By John O. Marsh Jr.
'McKinley's military service was a defining moment in his life and later shaped his public service.' He brought a personal concern for veterans to the American presidency. ***Page 66***


66

A New Generation of Tools for America's Warfighters
By Scott R. Gourley
A variety of improved and ingenious tools, many of them multiuse, became available from several respected manufacturers over the last year.
Page 70

70

Company Command: Building Combat-Ready Teams Partnering with Kuwaiti Land Forces
Company commanders from 1st Armored Brigade Combat Team, 1st Cavalry Division, share their experiences partnering with Kuwaiti troops at Camp Buehring, Kuwait. ***Page 76***

76

90

Historically Speaking: Antietam at 150
By BG John S. Brown, USA Ret.
'September 17 marks the 150th anniversary of the Battle of Antietam, the bloodiest single day in American History.' ***Page 90***

DEPARTMENTS

Letters 5
Advertisers in This Issue 7
Washington Report 8
News Call 10
Soldier Armed 81
Reviews 83
Sustaining Member Profile 89

www.surefire.com/socomsuppressors
NSN: 1005-01-599-6997
USSOCOM SELECTED
THE WORLD'S ULTIMATE SUPPRESSOR.
SO CAN YOU.
The SureFire SOCOM556-RC suppressor was selected by U.S. Special Operations Command as first among all competitors, in the most extensive and rigorous suppressor evaluation in history. Its patent-pending front plate and advanced gas-flow dynamics virtually eliminate first-round flash. The entire line of new SOCOM suppressors are the most advanced models ever built—and still feature SureFire's legendary quality, durability, and minimal point-of-impactshift.Accurate.Lethal.SureFire.
AMERICAN BUILT. AMERICAN PROUD.
SUREFIRE

Panasonic
ideas for life

Panasonic recommends Windows® 7.

intel inside
CORE i5 vPro

Access mission-critical information anywhere. Fully-rugged Panasonic Toughbook® mobile computers, powered by the Intel® Core™ i5 vPro™ processor. Keeping you combat-ready with industry-leading reliability is how we're engineering a better world.

panasonic.com/business-solutions

Toughbook 31 Toughbook 19 Toughbook H2

Intel, the Intel logo, Intel Core, Intel vPro, Core Inside and vPro Inside are trademarks of Intel Corporation in the U.S. and/or other countries. Toughbook notebook PCs are covered by a 3-year limited warranty, parts and labor. To view the full text of the warranty, log on to panasonic.com/toughbook/warranty. Please consult your Panasonic representative prior to purchase. Panasonic is constantly enhancing product specifications and accessories. Specifications subject to change without notice. ©2012 Panasonic Corporation of North America. All rights reserved. Mission-critical FG_FY12-3

TOUGHBOOK®

SOLUTIONS FOR U.S. ARMY

GEN Gordon R. Sullivan, USA Ret.
President, AUSA
LTG Theodore G. Stroup Jr., USA Ret.
Vice President, Education, AUSA

Mary Blake French — *Editor in Chief*
Larry Moffi — *Managing Editor*
Joseph L. Broderick — *Art Director*
Dennis Steele — *Senior Staff Writer*
Toni Eugene — *Associate Editor*
Christopher Wright — *Production Artist*
Jeremy Dow — *Assistant Editor*
Katharine Scott — *Assistant Editor*
Thomas B. Spincic — *Editorial Assistant*

Contributing Editors
GEN Frederick J. Kroesen, USA Ret.; LTG James M. Dubik, USA Ret.; and Scott R. Gourley

LTG Thomas G. Rhame, USA Ret.
Vice President, Finance and Administration, AUSA

James E. Burke — *Advertising Manager*
Meagan B. Bailey
Advertising Production Manager

Norman Campbell — *Fulfillment Director*
Valerie Holman — *Fulfillment Manager*

ARMY is a professional journal devoted to the advancement of the military arts and sciences and representing the interests of the U.S. Army. Copyright©2012, by the Association of the United States Army. ☐ **ARTICLES** appearing in ARMY do not necessarily reflect the opinion of the officers or members of the Council of Trustees of AUSA, or its editors. Articles are expressions of personal opinion and should not be interpreted as reflecting the official opinion of the Department of Defense nor of any branch, command, installation or agency of the Department of Defense. The magazine assumes no responsibility for any unsolicited material. ☐ **ADVERTISING**. Neither ARMY, nor its publisher, the Association of the United States Army, makes any representations, warranties or endorsements as to the truth and accuracy of the advertisements appearing herein, and no such representations, warranties or endorsements should be implied or inferred from the appearance of the advertisements in the publication. The advertisers are solely responsible for the contents of such advertisements. ☐ **RATES**. Individual memberships and subscriptions payable in advance (one year/three year): $21/$63 for E1-E4, cadets/OCS and GS1-GS4; $26/$71 for E5-E7, GS5-GS6; $31/$85 for E8-E9, O1-O3, W1-W3, GS7-GS11 and veterans; $34/$93 for O4-O6, W4-W5, GS12-GS15 and civilians; $39/$107 for O7-O10, SES and ES; life membership, graduated rates to $525 based on age; $17 a year of all dues is allocated for a subscription to ARMY Magazine; single copies, $3.00. For other rates, write Fulfillment Manager, Box 101560, Arlington, VA 22210-0860.

ADVERTISING. Information and rates available from the Advertising Production Manager or our advertising representatives, who are:

The Audit Bureau

James E. Burke and **Irene Lamar**, 230 Park Ave., Suite 1546, New York, NY 10169. (212) 697-2844. FAX (212) 682-1421. Email: advdpt@aol.com.

ARMY (ISSN 0004-2455), published monthly. Vol. 62, No. 9. Subscription $34 a year. Publication offices: Association of the United States Army, 2425 Wilson Blvd., Arlington, VA 22201-3326, (703) 841-4300, FAX: (703) 841-3505, email: armymag@ausa.org. Visit AUSA's web page on the Internet at www.ausa.org. Periodicals postage paid at Arlington, Va., and at additional mailing office.
POSTMASTER: Send address changes to ARMY Magazine, Box 101560, Arlington, VA 22210-0860.

Letters

'Remarkable Lieutenants'

■ COL Cole C. Kingseed, U.S. Army retired, showcased Winfield Scott's true greatness and the contributions of his lieutenants during the war with Mexico in his fine July article, "Winfield Scott's Remarkable Lieutenants." Although COL Kingseed mentions Scott's "unabashed egotism," the commanding general was not so self-centered that he failed to give unstinting credit to others, especially his junior officers like Beauregard, Grant, Johnston, Lee, McClellan, Meade and others who, as COL Kingseed points out, helped make victory possible.

We should also remember that it was Scott's superbly trained forces at the Battle of Chippawa during the War of 1812 that caused the British commander to exclaim, "Those are Regulars, by God!" That American victory by gray-clad U.S. infantrymen led West Point, the Virginia Military Institute, and The Citadel to replicate the design for cadet uniforms and—according to Robert Leckie in his seminal work, *The Wars of America*—it was here that "the esprit of the United States Army was born."

We often write off Scott's Civil War contributions because by 1862 he was so old that he could no longer mount a horse. MG George B. McClellan, a man who truly possessed unabashed egotism, could not wait to send his former mentor off to retirement so he could claim the top spot in the Union Army. Yet it was Scott who designed the Anaconda Plan, which sent the U.S. Navy off to blockade Southern ports and begin the process of isolating and defeating the Confederacy in what became America's first total war and a preview of World War I. Although he was a Virginian, the old soldier stayed true to the Union.

Many thanks to COL Kingseed for highlighting the contributions of this great American during one of the many wars in which Scott participated and for reminding us all of the rich heritage of our U.S. Army.

LTC Kelly M. Morgan, AUS Ret.
Florence, S.C.

'Crush of Requirements'

■ In the August issue of ARMY, the "CompanyCommand" article, "The Crush of Requirements from Higher Headquarters" reported, "It is unbelievable how many changes and last minute taskings come down on a daily basis" and "Last minute changes by higher are so out of control that no one believes a long-range training calendar … is worth the effort."

We were dealing with the same problems more than half a century ago. In the late 1950s I was the executive officer of Company D, 501st Airborne in the 101st Airborne Division at Fort Campbell, Ky. The training schedule that trickled down from division level, with additions from intermediate headquarters, might order us to spend the week, starting Monday the 10th, on the range for annual basic weapons qualification firing. I would book the ranges and trucks we needed, the supply sergeant would order the ammunition and any

This Month's Cover

Soldiers from the Pennsylvania Army National Guard's 2nd Squadron, 104th Cavalry, 56th Stryker Brigade Combat Team, 28th Infantry Division, watch for opposing force activity during the 2012 Saber Strike field training exercise in Latvia. Saber Strike is one of U.S. Army Europe's premier annual multinational training events, and soldiers from eight NATO partner countries participated this year. U.S. Army Europe maintains an extensive multinational training and engagement program in its 51-country area of responsibility. The story begins on Page 32.
(Cover photograph by Dennis Steele.)

training aids required, and the mess sergeant would order chow based on feeding us out on the ranges for a week. We would give refresher training on firing positions, windage adjustments on our M14s and range safety. By Friday the 7th, we would be ready to spend a week on the range starting Monday the 10th. Then, probably late in the day on Friday, "change one" would come down, telling us to cancel the week on the range and go into the field for platoon tactics instead.

My company commander, CPT Edward C. Meyer, went through the chain of command to speak to the division commander, MG William C. Westmoreland, and told him that we were being ordered to do too many things and thus not doing any of them well. He said this was inefficient, was not providing us the training we needed and was bad for troop morale. Fortunately, CPT Meyer had what it took to do that without damage to his own career. The division commander heard him out but responded that Meyer was just a young captain who did not understand the big picture. Nothing changed then, and it appears that it still hasn't.

Both MG Westmoreland and CPT Meyer eventually became Chief of Staff of the U.S. Army.

The captains quoted in the CompanyCommand article have the right ideas: delegate, prioritize and develop good time-management techniques. Also, you need to tell the battalion commander, or whomever you report to, about your over-scheduling problems. Even if he is not normally receptive to such things, he should want to know about your problems before they become his problems. Do be careful, though, about telling your division commander that you don't approve of the way he is doing things.

LTC THOMAS P. MCKENNA, USA RET.
Stowe, Vt.

Decorated Heroes

■ It was enjoyable reading the SGT Audie Murphy Club article in the August issue of ARMY. While Audie Murphy was one of the most decorated soldiers of World War II, however, he was not *the* most decorated. Another great soldier of that era, unknown to most, lived in Monroe, Mich., after World War II: LTC Matt Urban.

LTC Urban was not given the recognition he deserved until he was awarded the Medal of Honor by President Carter in 1980. According to the Total Army Personnel Command [now Army Human Resources Command] both Urban and Murphy were awarded 29 medals. (Urban claimed to have received three more medals than Murphy. The *Guinness Book of World Records* gave "the record" to Urban in 1989.)

At one time, Monroe, Mich., was also home to Tom Custer, the most decorated soldier of the Civil War, with two Medals of Honor, and his brother George Custer, brigadier general (brevet) at age 23.

COL RICHARD M. SCHROEDER,
USAR RET.
Temperance, Mich.

ARMY Magazine welcomes letters to the editor. Short letters are more likely to be published, and all letters may be edited. Please send letters to The Editor, ARMY Magazine, AUSA, 2425 Wilson Blvd., Arlington, VA 22201. Letters may also be faxed to (703) 841-3505 or sent via email to armymag@ausa.org.

Mission Command

■ COL Tom Guthrie's major point in his excellent June article on Mission Command is: "Researching how to improve the network … will mean little if we don't focus our energies on command climates and environments that develop the human foundation—trust, initiative, dialogue and freedom of action within intent." The human factor begins with how we treat people in their institutional training and education as well as in operational assignments.

Arguably, Mission Command has always existed in our best units, led and trained by people whose self-confidence derives from their technical expertise, tolerance for ambiguity, judgment, patience and understanding that for each thing that goes "wrong" in hi or her unit, there are hundreds if no thousands of things going "right." Th troops will never let you down. The signed up to do things right, and mos of the time they do. Leading them i about recognizing those things don right and giving ever more freedom t top performers while nurturing th next level and not promoting thos who are limited.

Clearly, personnel selection is th single greatest contributor to the per formance of any human enterprise and climate follows close behind.

It seems to me that Mission Com mand has in its foundation the skil and knowledge mastery for the job as signment and a healthy emotiona component liberated by climate an confidence from fear of failure. Ou best development comes from short falls at our limits followed by th leader's patient addressing of th shortfalls—first in training and later i operations, maintenance, supply an admin. For readers who may think m opinions too idealistic or unrealistic i the searing stress of wartime service the best leaders I know attend to cl mate as much if not more in comba Climate pervades every aspect of a un or school, and I believe the study of cl mate, philosophy of command and th emotional component of leader deve opment should be foremost for acces sions, promotions and assignments i every command and at every school.

COL SCOTT MARCY, USA RET.
Eagle River, Alaska

On Downsizing

■ I always begin reading ARM with BG John Brown's "Historicall Speaking." His August essay—"Wha if We Go Below 400K, Again?"—re counts our last bout of downsizing a ter the first Gulf War, with which I ar well acquainted. He poses a numbe of questions, and most important t me is: "Who can contain a crisis whil we are generating the forces necessar to reverse it?"

As I read, I recalled a photograph took of the 3rd Infantry Regiment crest mounted in granite at the Bander County Courthouse.

The year inscribed on The Old Guard crest is 1784, the founding year of the regiment and an interesting time in American history. The Congress of the Confederation created the U.S. Army on June 3, 1784, shortly after disbanding the Continental Army, saving one regiment of infantry to guard the Western Frontier. The Treaty of Paris was signed in 1783, ending the Revolutionary War and perhaps politically justifying the first Army downsizing. The price would be paid years later in the War of 1812.

It took about three years of lost battles to contain the British during that war. Clearly militia, the preferred congressional military establishment, was incapable of containing the crisis until we beat the British in a defensive battle at Baltimore. There was also the American victory in the Battle of New Orleans. Most important, we didn't eject by force of arms; the British had to focus on major distractions on the European continent.

Unlike technology-centric air and naval forces, it takes time to build a human-centric cohesive land combat force—an army. Should a future enemy get a foothold on our territory, air and naval power may distract but won't eject. Modern military capability compresses available time.

Downsize now and we won't have the time to build and thus be incapable of containing or ejecting. Human history always repeats.

LTC T. J. GALLI, USA RET.
Rockwall, Texas

ADVERTISERS IN THIS ISSUE

ATEC	39	Kipper Tool	7
AUSA Annual Meeting	57, 86, 87	Leupold & Stevens Tactical Optics	21
AUSA Membership	49	NovAtel, Inc.	29
Bell Helicopter	Cover II	Panasonic	4
Bethesda North Marriott Hotel & Conference Center	27	Plasan	9
BlackHawk	15	Raydon Corporation	37
Boeing BDS	23, 43	Revision Military Ltd.	11
DHS Technologies, LLC	Cover III	RUD Chain, Inc.	28
FLIR Systems, Inc.	41	SRC, Inc.	47
General Atomics Aeronautical Systems, Inc.	25	SureFire, LLC	3
General Dynamics C4 Systems	13	W.L. Gore & Associates	24
Harris RF	Cover IV		
iRobot Corporation	31		
ITT Exelis Electronic Systems	17		
ITT Exelis Night Vision	19		

ADVERTISING. Information and rates available from the Advertising Production Manager or our advertising representatives:

The Audit Bureau

James E. Burke and **Irene Lamar**, 230 Park Ave., Suite 1546, New York, NY 10169. (212) 697-2844. FAX (212) 682-1421. Email: advdpt@aol.com.

KIPPERTOOL®

LIKE US AND STAY INFORMED
800-295-9595
INFO@KIPPERTOOL.COM
KIPPERTOOL.COM

NEUMATIC NAILER &
OMPRESSOR TOOL KIT
T PNCTK-35TK-R

KIPPER TOOL HAS UPGRADED OUR PNEUMATIC NAILER & COMPRESSOR TOOL KIT.
AFTER EXTENSIVE RESEARCH, WE FOUND MODERNIZED OPTIONS TO INCREASE
EASE OF MOBILITY, SAFETY, MAINTENANCE AND PERFORMANCE EFFICIENCY.

Washington Report

Congress Reaches Stopgap Spending Agreement

In August, congressional leaders and President Obama verbally agreed on a six-month continuing resolution that would fund the government after September 30, when the current fiscal year ends, and postpone the ongoing budget fight between the Senate and the House. Senate Majority Leader Harry Reid (D-NV) and Speaker of the House John Boehner (R-OH) both issued statements saying they have reached agreement on the resolution, and Mr. Boehner said the legislation will be written during the August district work period so that it can be passed in September and sent to President Obama for his signature.

The continuing resolution will fund the government at roughly current levels, but it only postpones the funding fight and prolongs the threat of sequestration, which is a mechanism built into the Budget Control Act of 2011. If Congress does not identify alternative spending cuts by January, sequestration would trigger a $500 billion across-the-board cut in defense spending over the next decade, and the Army would have no say on where those cuts would be directed. Army Chief of Staff GEN Raymond T. Odierno warned as long ago as May that sequestration is "a template for hollowing out the force." It would cut some $50 to $57 billion from defense next year, followed by nine more years of similar cuts.

Senator Reid said that the continuing resolution "will provide stability for the coming months. … We can resolve these situations that directly affect the country as soon as the election is over." Congress will then have only a few months in which to pass a spending bill to fund the nation.

Outstanding Legislators. Representative Howard P. (Buck) McKeon (R-CA), chairman of the House Armed Services Committee, and Representative Adam Smith (D-WA), its ranking member, were celebrated in July as the recipients of the Association of the U.S. Army's 2012 14th annual Outstanding Legislator Award.

Rep. McKeon, who is a strong champion of national defense, led the opposition in the fight against DoD's proposal to raise TRICARE fees. He is also in the front ranks o those fighting to ensure that sequestration does not affec DoD. Rep. McKeon has served in Congress since 1992. H was first named ranking member of the House Armed Ser vices Committee in June 2009 and was selected chairman o the committee by his peers in the 112th Congress, whicl convened in January 2011.

Rep. Smith strongly supports providing the military witl the resources necessary to protect the nation, improvin budgetary efficiencies, and eliminating waste, fraud an abuse. He is an advocate for military personnel and thei families and is at the forefront in resolving veterans' issue including unemployment, homelessness and employmen for military spouses. Rep. Smith has held public office sinc 1991, when he was elected to the state senate of Washingto at age 25, and is now serving his eighth congressional term

TRICARE Prime Fees Up. In late July, TRICARE announce that its Prime enrollment fees for fiscal year (FY) 2013 wi be effective on October 1. TRICARE Prime enrollment fee for FY 2013 will be $269.28 for individual retirees an $538.56 for retirees and their families.

Although the FY 2012 National Defense Authorizatio Act allowed DoD to raise fees for TRICARE Prime beneficia ries, it can raise them based only on the annual cost of livin allowance (COLA). The COLA for FY 2012 was 3.6 percen as is the fee increase. Beneficiaries can choose to pay their en rollment fees in yearly, quarterly or monthly installments.

Retired servicemembers and their eligible family mem bers, survivors and former spouses pay TRICARE Prim fees, which are applied to the annual catastrophic cap. Su

Chief of Staff of the Army GEN Raymond T. Odierno and AUSA President GEN Gordon R. Sullivan, U.S. Army Retired, flank Representative Howard P. (Buck) McKeon (R-CA), chairman of the House Armed Services Committee, and Representative Adam Smith (D-WA), its ranking member, 2012 recipients of the AUSA Outstanding Legislator Award.

vivors of active duty servicemembers as well as medically retired servicemembers and their dependents are exempt from the annual fee increases.

A final calculation for COLA, which is based on the costs of goods and services that go into the Bureau of Labor Statistics' Consumer Price Index, will not be made until early October. It is estimated COLA for FY 2013 will range between 1.3 and 1.9 percent.

For more information, visit www.tricare.mil/costs.

Transition Assistance. President Obama announced in late July the launch of an overhaul of the Transition Assistance Program, which was designed to help servicemembers make the transition from military to civilian life and careers. The revamped program, called Transition Goals Planning Success (Transition GPS), is the first major overhaul in the voluntary three-day program in nearly two decades.

Transition GPS will be implemented throughout the military by the end of 2013 and will:

- Extend the three-day transition program to five-to-seven days.
- Provide individual assessment and counseling, including an individual transition plan.
- Include a five-day curriculum of financial planning, services and benefits available to veterans, and a redesigned employment workshop.
- Include a section on Military Operational Specialty codes that translates those military skills, training and experiences into civilian occupations and credentials.
- Include optional training to assist pursuing higher education, obtaining technical skills and training, or starting a business.
- Include a final event that verifies the participant's career readiness.

Medals Website. In an effort to deter fraudulent claims to unearned recognition, DoD launched a new website in July that lists the recipients of high-level military honors. The database was unveiled just weeks after the Supreme Court ruled that the 2006 Stolen Valor Act, which made it a federal crime to lie about receiving military medals, infringed on the First Amendment right to freedom of speech.

The site—http://valor.defense.gov—is a work in progress. It launched with the names of Medal of Honor recipients for actions since September 11, 2001, and then added lists of recipients of the Distinguished Service Cross, Navy Cross and Air Force Cross. It will soon name Silver Star recipients. The website includes descriptions of the awards and links to other resources.

The database does not include medals awarded before 9/11. "We are working quickly to compile accurate information on the heroes of the post-9/11 conflicts," said Under Secretary of Defense for Personnel and Readiness Erin C. Conaton. "At the same time, we will work with the military services to identify and seek to address the challenges associated with compiling data from earlier conflicts."

DoD Approves NATO Medals. The Department of Defense announced in August that the North Atlantic Treaty Organization (NATO) medal for NATO operations and activities in Africa and the NATO medal for operations and activities in Libya have been approved for acceptance and wear by eligible U.S. servicemembers and DoD civilian personnel.

For service in direct support of one of the following operations or activities in Africa: North Atlantic Council-approved NATO support activities in relation to the African Union, Operation Allied Provider, Operation Allied Protector and Operation Ocean Shield.

For service in direct support of Operation Unified Protector in Libya.

Individuals awarded these NATO medals should consult with their personnel offices for additional information concerning eligibility or to update their personnel files.

DoD Looks to Wind and Sun. The Department of Defense announced in August its support of wind and solar power energy for the nation's military bases. The plan, according to the *San Francisco Chronicle*, was conceived as a method of cutting military energy costs at a time when DoD faces substantial financial cuts in fiscal year 2013 and beyond.

According to the *Chronicle*, "A study the Defense Department released this year found that the lands surrounding four military installations in Southern California alone could generate seven gigawatts of solar energy, equivalent to the output of seven nuclear reactors."

The plan would also free military bases from reliance upon the larger power grids of their respective states and, ultimately, free the installations of the power outages that have become more common recently. In addition, the proposed plan would be large enough to provide power to local communities near the military facilities' locations, a financial incentive that could underwrite part of the project's initial—and ongoing—costs. ★

News Call

NATO Reports Increased Attacks in Afghanistan

Monthly trends released by NATO's International Security Assistance Force (ISAF) in late July indicate that enemy-initiated attacks (EIAs) in Afghanistan rose 11 percent from April through June compared to the same quarter in 2011. June accounted for the highest number of EIAs—which include small-arms fire, rocket fire, roadside bombs and mines—since August 2010.

Some experts attribute the increase to the Taliban gaining momentum. Others say the rise is not indicative of the Taliban's strength but rather the result of forcing the insurgents from population centers to more remote areas, where they scramble to retain safe havens and regain their influence. NATO attributes the rise in attacks to the increased presence of Afghan National Security Forces on the battlefield, improved reporting of attacks against them and this year's shorter poppy-harvesting season, which freed up insurgents earlier than usual.

Despite the numbers, ISAF casualties are actually down, and those in June were fewer than the same month in 2011 and 2010. DoD released the names of 37 Army casualties in July, however, which was the deadliest month in almost a year for coalition troops in Afghanistan. ISAF reported six coalition casualties in the first two days of August.

Women Closer to Combat. Women moved closer to combat in June, when the first female 91M Bradley Fighting Vehicle system maintainer was sworn into the Army at the Beckley Military Entrance Processing Station in Beckley, W.Va.

Twenty-one-year-old Cicely Verstein said she chose that military occupation specialty (MOS) because: "I've always been interested in working on cars. It seemed like an interesting job to me." Verstein has wanted to join the Army since she was 16 and said that she enlisted because she had found a job that appealed to her—not to set a precedent.

Verstein begins basic training at Fort Jackson, S.C., in November and will move on after that to advanced individual training at Fort Benning, Ga. As a system maintainer she will repair Bradley engines and other parts, diagnose system problems, and ensure that the vehicles are in top condition.

The 91M MOS is one of six previously closed to women because they were typically colocated with units serving in combat. The other five specialties now open to women are: 91A (M1 Abrams Tank System Maintainer), 91P (Artillery Mechanic), 13M (Multiple Launch Rocket System—MLRS—crewmember), 13P (MLRS Operations Fire Direction Specialist) and 13R (Field Artillery Firefinder Radar Operator).

Korean Armistice Remembered. On July 27, the Army, along with the other services, observed the 59th anniversary of the signing of the Korean War armistice in a ceremony at Arlington National Cemetery, Va., honoring veterans of that 1950–53 conflict. The commemoration included the laying of a wreath at the Tomb of the Unknowns, tributes to Korean War veterans at the Memorial Amphitheater and musical honors by the U.S. Army Band (Pershing's Own) and the 3rd U.S. Infantry Regiment (The Old Guard).

Secretary of Defense Leon E. Panetta laid the wreath and spoke later at the Amphitheater. "This is an opportunity to remember and to pay tribute to the 54,246 U.S. servicemembers who lost their lives in the Korean War," he said. "It's also an opportunity to celebrate the heroism, the sacrifices, the sheer grit and determination of the bravery of thousands of Americans who fought in the Korean War."

He also emphasized DoD's commitment to resuming the search for the remains of the more than 7,900 Americans missing in action in Korea. "We will leave no one behind," he said, "until all of our troops come home."

U.S. Army/SPC Andrew Baker

Afghanistan Reenlistment. *U.S. Army 2LT Jamal Banks, second from left, reenlists SGT Solomon Benavides in an oath-of-enlistment ceremony in Ghazni province, Afghanistan, in June. Both soldiers are with the 73rd Cavalry Regiment, 1st Brigade Combat Team, 82nd Airborne Division.*

THE ULTIMATE HEAD PROTECTION

The ultimate protection from trauma—

Blunt force, blast and ballistic.

With a lightweight wearability...

That allows for peak performance.

INTRODUCING BATLSKIN™

THE WORLD'S FIRST FULLY INTEGRATED, FULLY MODULAR HEAD PROTECTION SYSTEM.

More science. More technology. More protection. Less weight.
And you can tailor the system to the mission.
So a soldier can do what a soldier does.

BE REVISION READY.®

revisionmilitary.com/batlskin

REVISION.

© REVISION MILITARY INC. BATLSKIN™ IS A TRADEMARK OWNED BY REVISION MILITARY S.A.R.L. AND USED UNDER LICENSE BY REVISION MILITARY INC. REVISION READY® AND [illegible] ARE REGISTERED TRADEMARKS OF REVISION MILITARY. REVISION MILITARY LTD. 7 CORPORATE DRIVE ESSEX JUNCTION, VT 05452 USA

GENERAL OFFICER CHANGES*

**Assignments to general officer slots announced by the General Officer Management Office, Department of the Army. Some officers are listed at the grade to which they are nominated, promotable or eligible to be frocked. The reporting dates for some officers may not yet be determined.*

LTG D.R. Hogg from CG, USARAF/SETAF, Italy, to U.S. Mil. Rep. to NATO Mil. Committee, Belgium.

MG A.G. Crutchfield from CG, ACoE and Fort Rucker, Fort Rucker, Ala., to CoS, USPACOM, Camp H.M. Smith, Hawaii.

MG K.E. Dyson from Dir., Bus. Ops., OBT, OSA, Washington, D.C. to Dir. for Army Budget, OASA (FM&C), Washington, D.C.

MG K.W. Mangum from CG, ARSOAC, Fort Bragg, N.C., to CG, ACoE and Fort Rucker.

MG M.S. Tucker from CG, 2nd Infantry Div., Eighth U.S. Army, Republic of Korea, to Asst. DCS, G-3/5/7, USA, Washington, D.C.

Brigadier Generals: **D.C. Coburn** from Dir., Ops. and Spt., OASA (FM&C), Washington, D.C., to Dep. CoS, G8/Dir., Resource Mgmt., Third Army/U.S. Army Central, Camp Arifjan, Kuwait; **E.P. Donnelly Jr.** from Dep. CG, Spt., CSTC-A, OEF, Afghanistan, to Dir, Bus. Ops, OBT, OSA, Washington, D.C.; **B.D. Farris II** from Dir. of Future Plans, IJC, OEF, Afghanistan, to Dep. CG, 7th Infantry Division, JB Lewis-McChord, Wash.; **J.A. Maddux** from PEO, Ammunition/CG, Picatinny Arsenal, Picatinny Arsenal, N.J., to Dep. CG, Spt., CSTC-A, OEF; **M.A. McAlister** from Mil. Dep. Dir. for Army Budget, OASA (FM&C), Washington, D.C., to Dir., Ops. and Spt., OASA (FM&C), Washington, D.C.; **J.J. McGuiness** from Dep. CG, RDECOM/Sr. Cmdr., NSSC, Natick, Mass., to PEO, Ammunition/CG, Picatinny Arsenal; **J.S. Regan** from Dep. CG, ATEC/Dir., AEC, APG., Md., to Dir., RID, ARCIC, TRADOC, JB Langley-Eustis, Va.

ACoE—Aviation Center of Excellence; **AEC**—Army Evaluation Center; **APG**—Aberdeen Proving Ground; **ARCIC**—Army Capabilities Integration Center; **ARSOAC**—U.S. Army Special Ops. Aviation Cmd.; **ATEC**—U.S. Army Test and Evaluation Cmd.; **CoS**—Chief of Staff; **CSTC-A**—Combined Security Transition Cmd.-Afghanistan; **DCS**—Deputy Chief of Staff; **IJC**—International Security Assistance Force Jt. Cmd.; **JB**—Joint Base; **NATO**—North Atlantic Treaty Organization; **NSSC**—Natick Soldier System Center; **OASA (FM&C)**—Office of the Assistant Secretary of the Army (Financial Management and Comptroller); **OBT**—Office of Business Transformation; **OEF**—Operation Enduring Freedom; **OSA**—Office of the Secretary of the Army; **PEO**—Program Executive Officer; **RDECOM**—U.S. Army Research, Development and Engineering Cmd.; **RID**—Requirements Integration Directorate; **SETAF**—U.S. Army Southern European Task Force; **TRADOC**—U.S. Army Training and Doctrine Cmd.; **USA**—U.S. Army; **USARAF**—U.S. Army Africa; **USPACOM**—U.S. Pacific Cmd.

WWII Vets Honored. The Society of the 3rd Infantry Division hosted a ceremony in July honoring the veterans of Operation Dragoon, the Allied invasion of southern France that began in August 1944. During the celebration, six retired soldiers who participated in the assault—John Singlaub, Paul Donlon, Darryl Egner, Elias Hernandez, Michael Halik and Stanley Siemrzuch—were awarded the French Legion of Honor. (Siemrzuch died last October and was represented by his son.)

The amphibious and airborne assault, commanded by LTG Jacob L. Devers and often called the forgotten D-Day, liberated southern France. In less than a month, 94,000 Allied troops advanced 500 miles and took more than 100,000 Germans prisoner.

Director of operations, readiness and mobilization for the Department of the Army, MG Thomas S. Vandal, spoke at the event. "Overlooked by history or not, Operation Dragoon was a pivotal moment in the history of France," he said. "Given that [SGT Audie Murphy] earned a Distinguished Service Cross during Operation Dragoon, I think it speaks for itself and what troops did."

PTSD Probe Prompts Change. In late July, the Army changed its system of screening for post-traumatic stress disorder (PTSD). As a result of a probe of mental-health screening practices at Madigan Army Medical Center at Joint Base Lewis-McChord, Wash., where numerous soldiers' initial PTSD diagnoses had been reversed, the Army will no longer use forensic psychiatrists, as it did at Madigan, to evaluate soldiers diagnosed with PTSD but instead will use a clinical approach better suited for the military.

"What we found," Army Vice Chief of Staff GEN Lloyd J. Austin III said, "is that the forensic methods are no the right ones for the United State Army disability evaluation system." While officials at Madigan "acted in ac cordance with the standard of practice for civilian disability evaluations," tha evaluation is "simply not optimal fo the unique cases that the Army diag noses and reviews."

The Associated Press reported that according to an official familiar with the Madigan probe, 229 servicemem bers have been reevaluated, and the PTSD diagnoses of 127 of them have been reinstated.

Army Surgeon General LTG Patricia Horoho initiated the investigation ■ Madigan in February. A sweeping re view of how the Army assesses soldier for mental problems at all its facilitie was begun in May, and in June Secre tary of Defense Leon E. Panetta ordered a review across all branches of the mili tary. Those reviews are ongoing.

USAREUR Returns Sites. DoD an nounced in July that it will return one U.S. Army Europe (USAREUR) site i Italy and parts of one site in Germany to the respective host nations this year The returns are part of USAREUR's ef

COMMAND SERGEANTS MAJOR CHANGES*

Photographs currently unavailable: **CSM R. Capps** from 3rd IBCT, 1st Armored Div., Fort Bliss, Texas, to JTF-CS, JB Langley-Eustis, Va.; **CSM J.P. Norman** from USARJ, Camp Zama, Japan, to 1st Cavalry Div., Fort Hood, Texas; **CSM E. Rodriquez** from 1st Army East, Fort Meade, Md., to OSC-I.

■ ***IBCT**—Infantry Brigade Combat Team; **JB**—Joint Base; **JTF-CS**—Joint Task Force-Civil Support; **OSC-I**—Office of Security Cooperation-Iraq; **USARJ**—U.S. Army Japan.*

*Command sergeants major positions assigned to general officer commands.

WIN-T, the high speed tactical intranet.

Providing continuous communications throughout the battle.

- The WIN-T System is the Army's mobile network
- It provides commanders with information to make decisions whenever and wherever
- It embeds high speed intranet into tactical vehicles
- It puts the command post wherever the commander is
- It operates while soldiers are in motion and at the halt
- Its modular physical design fits in all vehicle types
- It is in production now with full rate production just ahead

For more information, visit **gdc4s.com/WIN-T**

GENERAL DYNAMICS

© 2012 General Dynamics. All rights reserved. Photo courtesy of the U.S. Army.

fort to increase efficiency and reduce costs.

The San Gottardo Signal Site near Vicenza, Italy, and eight buildings near the Crestview Housing Area in Wiesbaden, Germany, are no longer needed by the U.S. military in Europe. The San Gottardo site, with some 4,400 square meters consisting of a fence and concrete pad for vehicle parking, was formerly used by signal units for radio retransmission and training. The buildings at Wiesbaden are outside the Crestview Housing Area and have not been used for several years.

By 2015 the command expects to return four more major garrisons—Heidelberg, Manheim, Bamberg and Schweinfurt —consisting of 33 sites.

Best Warrior Changes. This year's Best Warrior competition has been shortened from five days to four and will take place October 15–18 at Fort Lee, Va. The grueling Sergeant Major of the Army-directed event pits soldiers and noncommissioned officers (NCOs) from the Army's major commands against each other to test their skills.

The new four-day format will mean less downtime and instruction, noted planning cell NCO in charge, SFC Randall Reed, during a walk-through for the event at Fort Lee in July. The makeover, he said, is largely the vision of Sergeant Major of the Army Raymond F. Chandler III, who wanted the competition to reflect the recent changes in Army tactics and doctrine. In addition, the board competition has been moved from the first day to the last day of the contest. Because Fort Lee's small arms ranges are being renovated, the weapons qualifications and other range events will take place using Engagement Skills Trainer and Reconfigurable Vehicle Tactical Trainer simulation facilities.

Best Warrior will more than retain its reputation, said SFC Reed. He could not disclose specifics about events or scenarios but promised, "It will be a high-paced competition that will challenge and surprise the competitors with events we haven't seen in previous years." The winning soldier and NCO will be announced at the Association of the U.S. Army Annual Meeting and Exposition the week of October 22.

New Fisher House. A new Fisher House Foundation home opened across the street from the state-of-the-art Fort Belvoir Community Hospital in Virginia in late May. It is one of nearly 60 Fisher Houses that provide free temporary lodging for the families of wounded servicemembers while they undergo treatment or rehabilitation at military hospitals.

The Fisher House Foundation builds the homes on the grounds of major military sites and Department of Veterans Affairs medical centers and then donates the buildings to the U.S. government. They offer private suites for families and have common kitchens, laundry facilities and dining rooms. The 10,000-square-foot ranch-style house at Fort Belvoir has suites for 12 families.

The program has grown since it began in 1990, and there are now Fisher Houses in 20 states as well as Washington, D.C., and Germany. Army Vice Chief of Staff GEN Lloyd J. Austin III, who spoke at the Fort Belvoir ribbon-cutting ceremony, said Fisher House provides servicemembers "with the very best medicine possible, and that medicine is the love and support of their family members."

Combat to College. A new week-long pilot program tested in June at Yale University could result in an intensive, college-level class that teaches soldiers who are leaving the service how to become successful students. The Warrior-Scholar Project eased the transition from combat to classroom for nine servicemembers by teaching them how to read for academic courses, how to write clearly and how to study effectively.

Jesse Reising, a co-founder of the project, said, "Veterans face a unique set of challenges that aren't faced by traditional freshmen. They likely have not used academic skills since high school and have to adjust to a very different social and cultural environment." The Warrior-Scholar Project helps the students over those hurdles, offering them classes and workshops led by professors and fostering interpersonal discussions.

Army Casualties in Afghanistan

The following U.S. Army soldiers were reported killed supporting Operation Enduring Freedom from July 1 to July 31, 2012. All names have been released through the Department of Defense; families have been notified.

PFC Trevor B. Adkins, 21
SPC Erica P. Alecksen, 21
SPC Jonathan Batista, 22
PFC Jose Oscar Belmontes, 28
SSG Richard L. Berry, 27
PFC Julian L. Colvin, 21
SFC Bobby L. Estle, 38
SPC Krystal M. Fitts, 26
PFC Theodore M. Glende, 23
SSG Raul M. Guerra, 37
SSG Carl E. Hammar, 24
SGT John E. Hansen, 41
SPC Darrion T. Hicks, 21
SPC Justin L. Horsley, 21
1LT Sean R. Jacobs, 23
CPT Bruce A. MacFarlane, 46
SSG Robert A. Massarelli, 32
SGT Erik N. May, 26
PFC Cody O. Moosman, 24
CPL Juan P. Navarro, 23
PFC Alejandro J. Pardo, 21
SSG Brandon R. Pepper, 31
SPC Sergio E. Perez Jr., 21
SPC Benjamin C. Pleitez, 25
SGT Jose J. Reyes, 24
PFC Jeffrey L. Rice, 24
SGT Michael E. Ristau, 25
SGT Daniel A. Rodriguez, 28
PFC Adam C. Ross, 19
PFC Brenden N. Salazar, 20
SSG Ricardo Seija, 31
PFC Cameron J. Stambaugh, 20
SGT Michael J. Strachota, 28
SPC Nicholas A. Taylor, 20
SPC Clarence Williams III, 23
SGT Eric E. Williams, 27
SPC Sterling W. Wyatt, 21

HONOR
DOES NOT HAVE TO BE DEFENDED.
FREEDOM DOES.

SCAN. EXPLORE.

BLACKHAWK.COM

BLACKHAWK!

HONOR. AS A WAY OF LIFE.

Mary Louise Rasmuson, 1911–2012

Former Women's Army Corps commandant and advocate for women's military service, COL Mary Louise Rasmuson, U.S. Army retired, died July 30 in Anchorage, Alaska, at age 101.

COL Rasmuson served in the Army from 1942 to 1962 and was a member of the first Women's Army Corps (WAC) class. President Dwight D. Eisenhower appointed her as the fifth commandant of the WAC in 1957, and she was subsequently reappointed to that position by President John F. Kennedy.

During her service with the WAC, Rasmuson worked with Congress to improve laws regarding female service credit and benefits. After leaving the Army, Rasmuson remained an ally for female servicemembers and veterans until her death.

Over the course of her military career, she was awarded the Women's Army Corps Service Medal, American Campaign Medal, World War II Victory Medal, Army of Occupation Medal, National Defense Service Medal and Legion of Merit award with two oak leaf clusters for her work integrating African-American women into the WAC.

Rasmuson served as honorary chair and patron of the Veterans Memorial Project and was a member of the U.S. Army Alaska Citizen's Advisory Committee, Veterans of Foreign Wars, and a lifetime member of the Association of the U.S. Army and the National Association for the Advancement of Colored People.

Professors as well as students deemed the pilot a success, and the project staff are now raising funds to continue the program and assessing the pilot session of the "academic boot camp."

Olympic Gold for Army. U.S. Army Marksmanship Unit (USAMU) SGT Vincent C. Hancock won the gold medal in men's skeet on Day 4 of the London Olympics, which began in late July. With a total score of 148 out of 150 shots in London, SGT Hancock broke his own record set in the 2008 Beijing Olympics and became the first shotgun shooter to win consecutive gold medals in men's skeet.

SGT Vincent Hancock, with the U.S. Army Marksmanship Unit, became the first shotgun shooter to win consecutive Olympic gold medals in men's skeet on July 31 at the Royal Artillery Barracks in London.

The U.S. Army sent the largest contingent of athletes and coaches ever to the London 2012 Olympics and Paralympics, which will continue into September. Four coaches and 14 soldier-athletes are competing in shooting, Greco-Roman wrestling, boxing, track and field, and the modern pentathlon.

Nine Army shooters—seven from the USAMU and two from the U.S Army World Class Athlete Program (WCAP)—are members of Team USA. Other Army athletes competed in prone rifle, double trap shotgun, and rapid-fire, free, and sport pistol events. Like SGT Hancock, USAMU SGT Glen Eller took gold and set records in Beijing in 2008 and competed in double trap shooting.

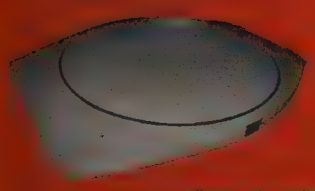
New to the Olympics this year was U.S. Army WCAP SPC Dennis Bowsher, who competed in the modern pentathlon, which includes fencing, swimming, equestrian, running and shooting events.

Among the soldier-athletes competing in the 2012 Paralympic Games that begin in late August is USAMU SFC Josh Olson, who became the first athlete with a physical disability assigned to the WCAP and is the first active duty soldier wounded in combat named to the 2012 Paralympic Games. SFC Olson, a rifleman and machine gunner with 101st Airborne Division when he lost his right leg in Iraq in 2003, is competing in two rifle events.

EXELIS

THE POWER OF INGENUITY

Remote mission.
Proven broadband.
Cost-effective solution.



In the world of satellite communications, GNOMAD stands apart. Combat-proven by the U.S. Army in Northern Iraq and Kuwait, GNOMAD equips forces with reliable broadband communications by extending Wi-Fi and 3G/4G cellular networks into harsh environments.

Modular by design, GNOMAD delivers affordable networking beyond line-of-sight while on the move. To learn more about GNOMAD's innovative capabilities, visit **www.exelisinc.com/gnomad-dom**.

www.exelisinc.com

Exelis and "The Power of Ingenuity" are trademarks of Exelis Inc. ITT is a trademark of ITT Manufacturing Enterprises, LLC, and is used under license. Copyright © 2012 Exelis Inc. All rights reserved. Photo courtesy of the U.S. Army and Sgt. Ken Scar

Flynn Heads DIA. *U.S. Army LTG Michael T. Flynn is the new director of the Defense Intelligence Agency. LTG Flynn served as assistant director of national intelligence for partner engagement since 2011. He succeeds LTG Ronald Burgess Jr., who has retired.*

C4ISR Lab at Aberdeen. A new laboratory hub that tests the integration and readiness of command, control, communications, computers, intelligence, surveillance and reconnaissance (C4ISR) systems officially launched in June at Aberdeen Proving Ground, Md. The C4ISR Systems Integration Laboratory (CSIL) is a central site for seven labs that will cooperate to test vendor-provided electronics, gear and software before a Network Integration Evaluation (NIE).

Engineers at CSIL will assess, evaluate and integrate new equipment by itself and as part of the Army network, saving the service time and money by identifying and eliminating problems early. In previous NIEs at White Sands Missile Range, N.M., integration glitches and interoperability issues had to be addressed and fixed on-site. Now CSIL will evaluate new gear and software, resolving problems in advance of field testing and ensuring the systems will integrate into the NIE network.

New NGB Chief. The Senate confirmed GEN Frank J. Grass as the next chief of the National Guard Bureau (NGB) in late July. As chief of the NGB, he received a fourth star and became a member of the Joint Chiefs of Staff as mandated by the 2012 National Defense Authorization Act. He succeeds Air Force Gen. Craig McKinley, who has held the position since November 2008 and retires this month.

As the 27th chief of the NGB, GEN Grass is the official channel of communication to the adjutant generals of the states, three territories and the District of Columbia. He also serves as military advisor to the President, the Secretary of Defense and the National Security Council.

GEN Grass was previously deputy commander of U.S. Northern Command and vice commander, U.S. Element, North American Aerospace Defense Command. He enlisted in the Missouri Army National Guard in 1969. His Army career has included a variety of command and staff positions as a traditional National Guard soldier, in the Active Guard and Reserve Program, and on active duty. ★

Europe's BJOC. *U.S. Army CPT John Arthur—1st Battalion, 4th Infantry Regiment—maneuvers through an obstacle course during U.S. Army Europe's Best Junior Officer Competition in Grafenwoehr, Germany, in late July.*

EXELIS
THE POWER OF INGENUITY
See anything.
Anywhere.
At any time.
Introducing i-Aware™ from ITT Exelis. Our newest generation of night vision goggles allow you to do far more than simply see through the dark. You can identify a target, follow a map using GPS coordinates, and even send or receive live UAV/UGV video. With the integration of data feeds, plus flexibility of Generation 3 image intensification and thermal overlays, i-Aware is the ultimate soldier modernization solution for all-weather, day or night force protection, mission execution and information sharing across the battlefield.
www.exelisinc.com
Exelis and "The Power of Ingenuity" are trademarks of Exelis Inc.
ITT is a trademark of ITT Manufacturing Enterprises, LLC, and is used under license.
Copyright © 2012 Exelis Inc. All rights reserved.
(NYSE: XLS)

Front & Center

Hot Topics

By GEN Frederick J. Kroesen
U.S. Army retired

A recent issue of TIME magazine devoted its cover story to the growing problem of soldier suicides. The article dealt principally with anecdotal accounts of two soldiers whose deaths surprised—perhaps shocked—their families, friends and colleagues. Also included are pages of statistics identifying the variety of victims, categories of probable causes, contributing factors and a summary statement that we have lost more soldiers to suicide than to combat deaths in the past year.

There are references to the Army suicide prevention program and observations by psychiatrists and psychologists addressing the *whys* and *hows* of the current situation. It is, overall, an enlightening exposure of the problems and an informative presentation of the Army's efforts to combat the trend.

Nowhere, however, in this or the many other news reports is attention given to what I believe is the underlying cause: the stress created in the entire force by the mission requirements of the past decade. Since the 9/11 attacks, the Army has been continually committed to an operational tempo that has returned soldiers to combat or to other "hardship" (unaccompanied) tours of duty at a pace and over a period not contemplated since World War II. For an Army whose career complement is mostly married, with family concerns and responsibilities, the pace is wearing and debilitating. It is also erosive to combat effectiveness. Courage is an expendable factor; soldiers become less confident of not only their own survivability, but also of their willingness and ability to fulfill responsibilities of their unit and for the "band of brothers." Over time, depression is not uncommon, and depression is almost a constant factor in the lives of the suicidal, but this is only half the problem.

When soldiers return from a combat tour they reenter a community that has been under equal stress. Their spouses and children have suffered the anxiety of awaiting the next casualty report from the combat zone. They are committed to the collective support of the next family to receive tragic news and the despondency that affects them all. Wives or husbands who have been single parents for a year or more then have to assimilate a familiar "stranger" who interrupts what had become a settled routine, but one who might be gone again too soon.

Corporals, sergeants, lieutenants and captains have to attend career education schools that separate them again for a few weeks or months, and when they return they may be assigned to a unit now preparing to deploy on another mission, a preparation that might send them to a national training center for another separation period. While this schedule does not always apply, it is a community constant that *affects* everyone, and there has been little respite for either soldiers or their families for the past 10 years. The cumulative effect is manifest in increases of domestic violence, divorce rates and, yes, suicides.

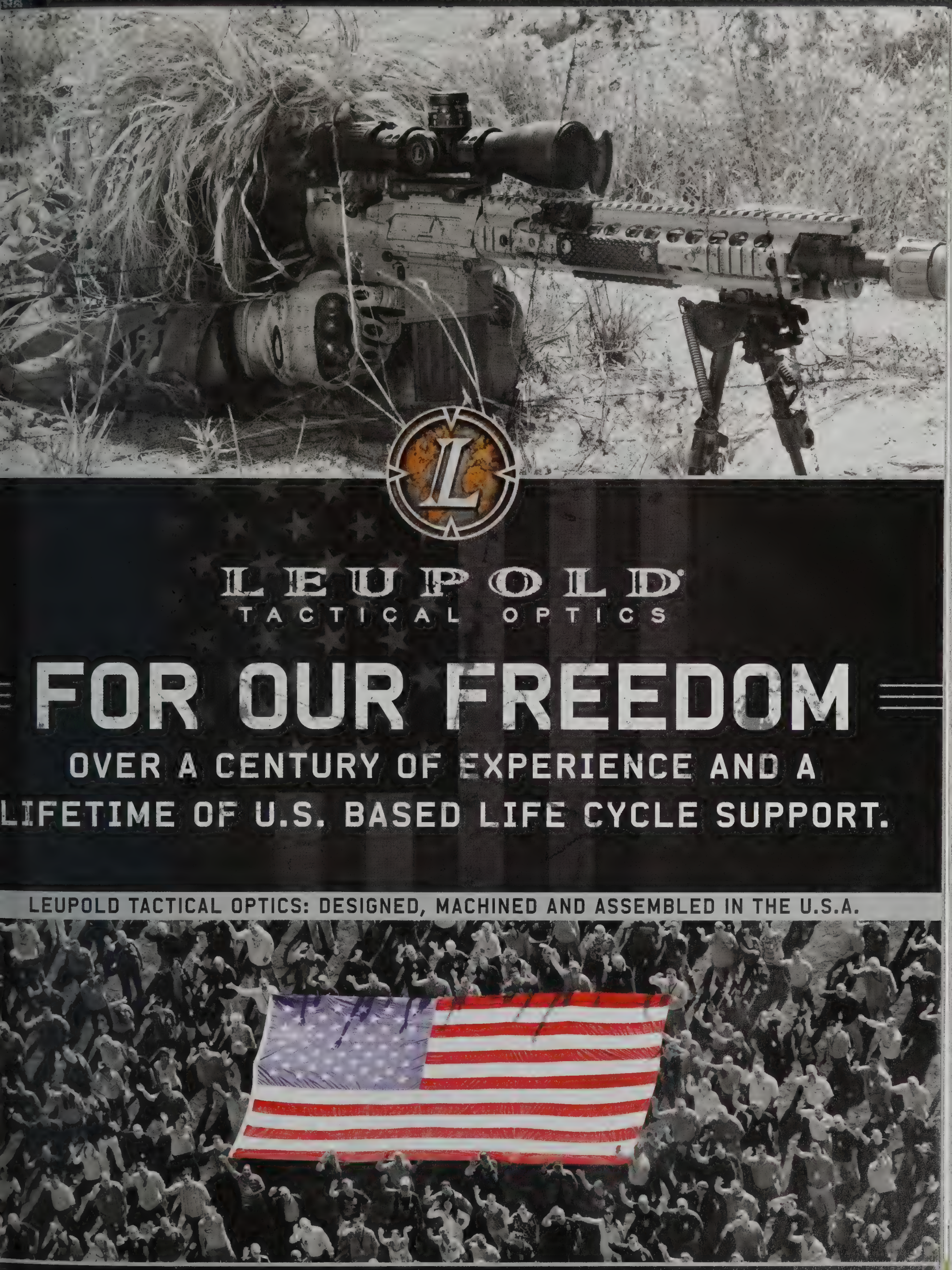
The Army has been too small for its mission load for many years, and the portent for the future is more of the same. Only a return to an adequately sized force can promise relief for this situation.

A second hot topic is the leaking of classified information to the news media and thus to the world at large. Speculation about the sources of such leaks and about efforts to expose or to cover up the identity of the transgressors is evident in many news reports and opinion columns. A common theme in most is an attack of "the system" of classification.

There are, apparently, almost 5 million people who are granted access or are authorized to classify the written word and its disposition. The charge is made that too many overclassify, creating a mountain of material that does not need to be protected. They do it out of ignorance of the standards, for self-protection against a failure to know a real need, or to hide inconvenient or embarrassing truths. Whatever the reasons, the system can be fixed through education, training and better control over those exercising the practice. The result will be the elimination—or at least a reduction—of leaks because everyone will recognize that what is classified really needs to be protected.

No one (none that I have read) identifies what I believe is the basic flaw. Almost no one is ever punished for leaking, even when divulging information that is seriously damaging and that might even justify a charge of treason. Harking back only to the revealing of the Pentagon Papers, whether properly classified or not, they were marked secret and deserved protection until declassified. No one was ever punished even though those responsible were known.

Since then there have been too many instances of inquiring and investigating reporters acquiring and publishing information damaging to our national interests. The Rosenbergs were the only known spies executed from the Soviet spy network. We lightly punished Alger Hiss for his involvement in espionage, and one government employee is in jail for spying for our ally, Israel. Most cases, however, have ended with charges dropped or, as recently, by a plea bargain admitting to a misdemeanor. In no case has a news organization been charged for releasing or publishing information that triggers serious consequences.


LEUPOLD
TACTICAL OPTICS
FOR OUR FREEDOM
OVER A CENTURY OF EXPERIENCE AND A
LIFETIME OF U.S. BASED LIFE CYCLE SUPPORT.
LEUPOLD TACTICAL OPTICS: DESIGNED, MACHINED AND ASSEMBLED IN THE U.S.A.
TACTICALOPTICS@LEUPOLD.COM | WWW.LEUPOLD.COM | PORTLAND, OREGON, U.S.A.
MODERN DAY MARINE #1535 | AUSA ANNUAL CONFERENCE #3803

The protection of information concerning military operations, the collection of intelligence, and the development of techniques, technologies and hardware essential to our maintaining dominant military capabilities is an absolute requirement. Exposure is, first, a threat to the lives of soldiers engaged in a directed mission, and ultimately a threat to our citizens who may be attacked by an enemy whose capabilities are enhanced by the information divulged. It is also damaging to the credibility of our national security practices among our allies whose personnel become vulnerable to counteractivity. Cooperation in our common pursuits suffers, sometimes irreparably.

Guaranteed punishment for transgressions is a requisite element of our legal system. It is no less a need for the protection of information that can harm or defeat our programs and particularly our military personnel. If our laws are not adequate in this regard, they need to be strengthened because peace is not at hand, threats abound, and secret preparedness and preparations must not be compromised. □

GEN Frederick J. Kroesen, USA Ret., formerly served as Vice Chief of Staff of the U.S. Army and commander in chief of U.S. Army Europe. He is a senior fellow of AUSA's Institute of Land Warfare.

Mission Command and Army Training Doctrine

By LTG James M. Dubik
U.S. Army retired

"Train as you fight" is one of the most essential principles of Army training doctrine, yet for more than 10 years this principle has been applied only partially. Why? Because fighting has been mostly decentralized and training mostly centralized. The Army's centralized "road to war" training philosophy erased "white space" from home-station training calendars; deemphasized training meetings, placing more focus on training support meetings; encouraged training to time rather than training to standard; and made training a "top-down" rather than a "bottom-up" activity.

Fortunately, the combat training centers (CTCs) retained the commitment to setting conditions for decentralized execution, and the reality of fighting in Iraq, Afghanistan and elsewhere demanded decentralized execution, so a considerable amount of home-station training also focused on it. The reality of combat more than offset the centralized training management habit the Army acquired. If the road-to-war style is allowed to continue, however, it could become an impediment to developing mission command in a peacetime army.

Mission command demands trust among the leader teams that make up the chain of command, leaders who properly use initiative within the senior's intent and units that must be able to act, when the situation requires, not only in the absence of orders but also contrary to orders. A centralized approach to training and training management decreases the probability of developing the habits demanded by mission command. Among the many ways leaders can use Army training doctrine to create and reinforce mission command in leaders and units, the following three areas stand out.

Training Meetings

Properly run training meetings force training to be a bottom-up activity. They also force officers and NCOs at each level to know and understand their mission-essential training tasks—individual, leader and collective; their current status of proficiency relative to these tasks; and, therefore, the gap between where they are and where they must be, which defines a unit's training requirements.

When a battalion commander holds his or her training meeting with company commanders, each commander should have already used his or her squad's and platoon's training requirements as well as the company's to develop the training schedules being briefed to the battalion commander. Some of these tasks will be executed within the context of a larger training exercise—whether at home station or deployed. Others will be executed separately by the unit's leaders. Regardless, the key is that each echelon of command identifies its training requirements relative to the unit's essential tasks and plans to execute these tasks within the context of mandated training exercises.

For example, a battalion might be scheduled to deploy for a three-week training exercise with an ally. The tasks to be trained in preparation for and conduct of this exercise should be driven from the bottom up. The role of senior leaders and headquarters is to plan the home-station preparatory training program and the deployed training exercise with enough flexibility to allow a sufficient match among the senior leader's training goals, the allied training goals and the subordinate unit leaders' training requirements. Such an approach not only respects the role of the junior leader as the chief trainer of his or her unit but also encourages junior leaders to think and act within the intent of their seniors.

Preparation for and Assessment of Training

Training with ill-prepared leaders or under poor conditions means that training will not be done to standard or that it will not actually be performance-oriented. Well-prepared leaders training under well-constructed conditions, on the other hand, improve the quality of training and help establish trust up and down the chain of command; proficiency-based trust is one of the most necessary components of mission command.

Preparation for training includes at least three essential elements: preparing leaders, preparing the conditions and preparing the resources. Preparing leaders is a shared "two-level-down"

INTELLIGENCE IN REAL-TIME TO THE FRONT LINE.

The U.S. Army's Enhanced Medium Altitude Reconnaissance and Surveillance System (EMARSS) will provide combat units in austere locations with direct, actionable, near real-time intelligence. Selected by the Army, the Boeing EMARSS solution brings together a new-generation platform and the most advanced, modular ISR systems to accommodate a broad range of missions—unmatched capability to help ensure ground units every possible advantage.

BOEING

responsibility. For example, a battalion commander is responsible for making sure his or her company commanders (a responsibility shared with the brigade commander) and platoon leaders understand the task and standards and know how to set the right conditions so that the task can actually be performed to standard. A company commander is responsible for making sure his or her platoon (a responsibility shared with the battalion commander) and squad leaders are similarly prepared. Such preparation cannot be accomplished merely by downloading information from a computer. Leader preparation must include officer and NCO professional development sessions or tactical exercises without troops (TEWTs). Senior leaders must teach junior leaders.

Preparing the conditions, also a two-level-down responsibility, requires leaders to walk the training ground to make sure it will allow the training task to be executed to standard. Performance-oriented training requires proper conditions. Preparing conditions includes securing the proper resources—training aids, simulators, ammunition, vehicles and equipment—so that the task can be done to standard. It also may include building objectives, digging defensive positions, emplacing obstacles or whatever else has to be fabricated so that the task can be performed to standard. A brigade or battalion commander, for example, could merge preparing leaders and conditions in one TEWT. During the time that he or she walks the training ground, the senior commander could both teach subordinates and identify what training resources are necessary to set the right conditions for training.

Army training doctrine allows leaders to use several methods to assess training: internal or external, formal or informal. All require training and evaluation outlines (TEOs). Army CTCs use the external/formal approach to training assessment. Each CTC has a set of observer/controllers, external to the chain of command, who have TEOs based upon the tasks being trained. These TEOs are usually modified in the sense that they commonly contain only the tasks and standards essential to the conduct of formal after action reviews (AARs). External/formal assessments are important elements in the Army's approach to training, but so are internal/informal assessments.

This second form of assessment is often underappreciated for home-station training. It requires unit leaders (internal) to conduct their own AARs (informal) in which they assess themselves and their own units and determine if the training task was done to standard or needs to be redone. The assessment is still done against a TEO similar to those used at CTCs. These TEOs should be in the pocket of each leader, who should be taught to conduct AARs no less rigorously than the external/formal assessment.

The internal/informal method of assessment is less resource-intensive, but, perhaps more importantly, it imprints in the minds of leaders at each echelon that they are responsible for their unit's performance to standard—a vital mind-set for mission command. Furthermore, when senior leaders see their subordinates use this method well, it reinforces in execution the trust already being developed in training meetings and in training preparation.

Situational Training Exercises (STX)

An STX is an exercise designed to set the conditions for one or more individual, leader or collective training tasks to be performed to standard. Some STXs are quite discrete. For example, an STX could be established to train one individual task like emplacing a claymore mine or moving under direct fire. An STX could also focus on one collective task like establishing a support-by-fire position or reacting to an IED attack, each of which would entail its own selected individual and leader tasks. Other STXs are more complex. A platoon task of conducting an ambush, a company task of conducting combat resupply operations or a battalion task of conducting a battalion deliberate attack are examples of more complex STXs.

STXs can be further delineated. Some can be skill-development STXs

GRAY EAGLE | with Triclops Gimbals

THREE TIMES THE SITUATIONAL AWARENESS

- Three gimbals provide greater situational awareness
- Track and designate multiple targets simultaneously
- Apache Helicopter or ground forces control of multiple EO/IR gimbals onboard Gray Eagle
- Manned/unmanned teaming increases standoff range for attack aircraft
- Single aircraft can serve multiple users through interoperability

GENERAL ATOMICS AERONAUTICAL

©2012 General Atomics Aeronautical Systems, Inc. www.ga-asi.com Leading The Situational Awareness Revolution

that require repetitive training under increasingly difficult conditions until the skill is embedded in the individual, leader or unit being trained. These are akin to rote learning. Others develop judgment in leaders and soldiers. These judgment STXs require that senior trainers set conditions that demand that their subordinate leaders use initiative within the senior's intent. Such conditions may include disposing the opposing forces differently from the brief at the start of the STX, friendly assets that are expected to be available but are not, or a mission change between the start of the STX and its completion. To the extent that most discrete and skill-development STXs are "free play," they all contribute to the development of a leader's judgment. Judgment STXs go one step further, though: They specifically and intentionally set conditions to develop a leader's judgment. These kinds of STXs play a critical role in creating a mission command environment within a unit.

Retaining Initiative

One of the most talked about leader development, training and retention issues is retaining the degree of initiative now displayed by leaders in combat, hence the Army's proper emphasis on mission command. Army training doctrine is an important part of the solution to that concern. Training that is planned, prepared, executed, assessed and redone to standard provides a means to develop and sustain a mission command climate within a unit.

At least two obstacles stand in the Army's way, however. First, leaders must become the chief trainers, teachers and assessors within their units. To do this, the overly centralized approach to training management and the nearly exclusive use of external/formal training assessment must go. Second, the Army as a whole must relearn its own training doctrine. Relearning will require that the Army face and dispel the illusion that we all know how to train. Ten years of road to war have eroded much of the institutional knowledge the Army once had with respect to training as Army doctrine dictates. Today's brigade commanders were battalion S3s or executive officers in 2002, today's battalion commanders were already company commanders in 2002. Many formative experiences, therefore, happened under the misconception that Army training and training management equal the road to war approach.

To regain a "train as you fight" philosophy as routine behavior in leaders and units—the philosophy mandated by Army training doctrine and necessitated by mission command—the Army should consider a defined, laser-focused program, perhaps akin to the one that the Army used in the late 1970s/early 1980s when it first introduced performance-oriented training to the force.

LTG James M. Dubik, USA Ret., is a former commander of Multi-National Security Transition Command-Iraq and a senior fellow of AUSA's Institute of Land Warfare.

A Welcome Return to the Guam Doctrine

By Richard Hart Sinnreich

On June 28, with most of the nation's news media preoccupied with the Supreme Court's decision on the constitutionality of the 2010 Affordable Care Act, CNN quietly reported Defense Secretary Leon Panetta's announcement that the U.S. military soon will begin deploying specialized Army units around the world to assist friendly nations in developing and improving their own self-defense capabilities.

"In the past," CNN quoted Panetta, "the United States often assumed the primary role of defending others. We built permanent bases. We deployed large forces across the globe to fixed positions. We often assumed that others were not willing or capable of defending themselves. Our new strategy recognizes that this is not the world we live in anymore."

Acknowledgment that the United States can't afford to sustain the primary burden of enforcing international security in the world at large is a welcome return to strategic modesty, but it's by no means the first time that we've adopted that sensible military posture.

At a press conference in Guam in July 1969, President Richard Nixon announced that, while the U.S. always would come to the aid of our allies at need, we thenceforth would expect them to assume the principal responsibility for their own security.

Expanding on that theme in a speech to the nation in November 1969, Nixon set out three principles of what became known as the Guam Doctrine:

- First, the United States would keep its treaty commitments.
- Second, we would provide a shield if another nuclear power threatened the freedom of a nation allied with us or one whose survival we considered vital to our security.
- Finally, in cases involving other threats of aggression, we would furnish military and economic assistance when requested in accordance with our treaty commitments. But we would look to the nation directly threatened to furnish the bulk of the military manpower required for its own defense.

"The defense of freedom is everybody's business, not just America's business," the President declared. "And it is particularly the responsibility of the people whose freedom is threatened."

The parallels between today's circumstances and those prompting the Guam Doctrine aren't hard to find. In January 1969, the United States had been engaged in Vietnam for more than six years. The war already had

cost more than 40,000 American lives, and its dollar costs were running at more than $80 billion per year.

In March 1969, while working to build up and improve the South Vietnamese army under the rubric of "Vietnamization," the United States began drawing down what by then had become more than half a million U.S. troops in South Vietnam.

Today, as in 1969, we seek to extract ourselves from a war enlarged far beyond its original aims, and that has cost far more in lives and treasure than Americans ever expected to invest. At the same time, as was also true in 1969, American leaders are rightly concerned, lest extraction from Iraq and Afghanistan be seen by friends and potential enemies as a return to isolationism. Whence Mr. Panetta's announcement.

In a recent perceptive article for the Foreign Policy Research Institute, Swarthmore College's Dominic Tierney compares U.S. military behavior during the last century to Jonathan Swift's *Gulliver's Travels*, shifting like Gulliver between Lilliputian and Brobdingnagian concerns, between self-appointed intervention in the internal affairs of badly governed states and the need to deter or defeat outright major power aggression.

"The emergence of great power rivals," he notes, "tends to blot out the sun, and draw U.S. attention away from failed states. The danger from Lilliputians is overshadowed when Brobdingnagians appear on the horizon. After the great power threat diminishes, the light shines through, revealing the hazard posed by weak countries." Or at least, the temptations they offer.

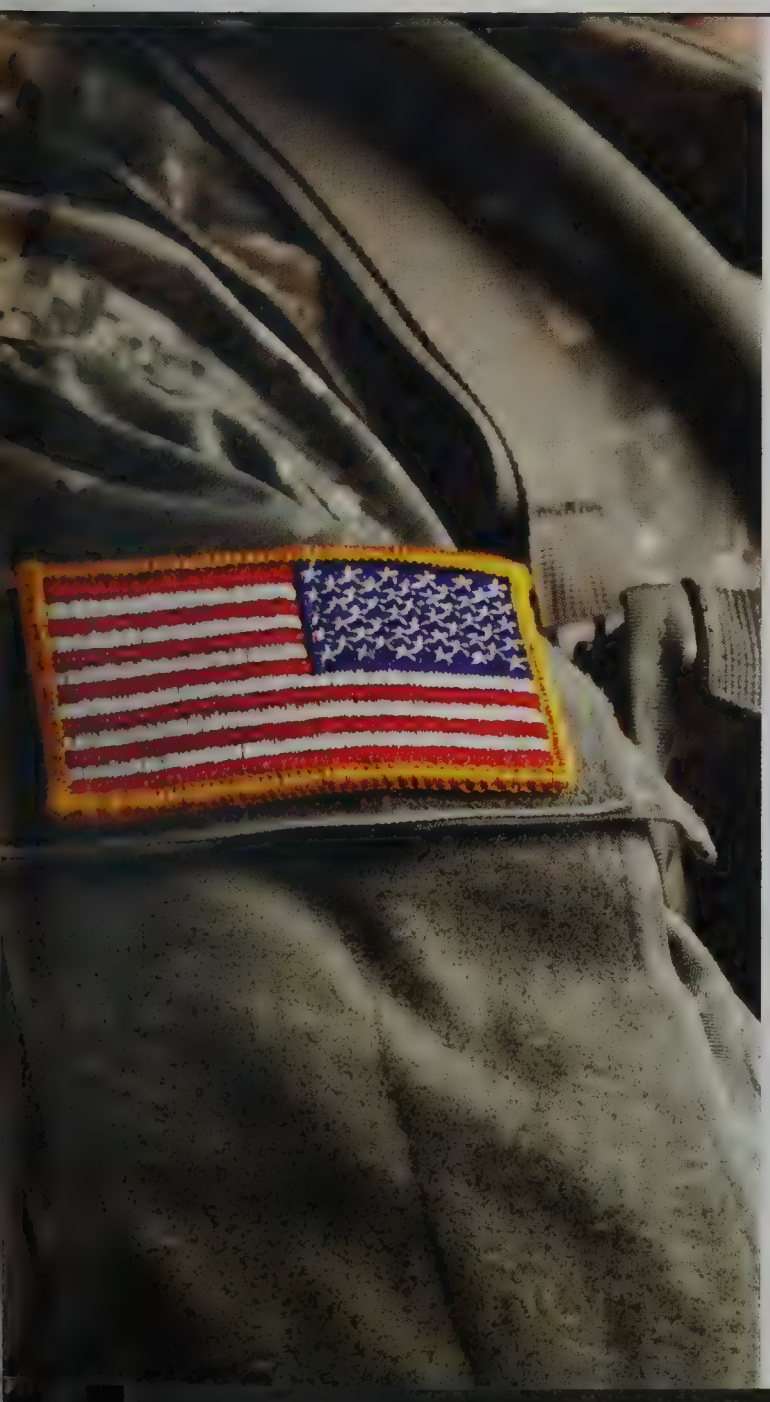
What Tierney fails to point out, though, is that while expensive, our wars of the last century against hostile great powers have without exception left us strategically better off afterward than before we intervened. Whereas the opposite has been true of the majority of our far more numerous interventions of choice in small states failing to conform in one way or another to our ideological preferences.

On the contrary, the latter repeatedly have incurred both domestic disaffection and international opprobrium, and far from improving our strategic circumstances, have more often than not left behind an enduring residue of suspicion and resentment.

So while we should welcome evidence that the policy pendulum has begun once more to swing away from ill-conceived and worse managed efforts to reshape resistant societies in our image at bayonet point, we'd be wise not to become too complacent.

As Tierney warns, the new danger is that: "As China rises, Gulliver will view the Lilliputian threat through the Brobdingnagian lens." That's a mistake that we made once before, for which we're still paying. □

***Richard Hart Sinnreich** writes regularly about military affairs for* The Lawton *(Okla.)* Sunday Constitution. *This article originally appeared in the July 1, 2012,* Lawton Constitution *and is reprinted by permission of the author.*



YOUR MILITARY REUNION HEADQUARTERS.

It's not too early to begin planning your next reunion. At the Bethesda North Marriott Hotel & Conference Center, military meetings and reunions are our specialty. Our dramatic expansion provides your group with a luxury conference center offering some of the largest event facilities in the greater Washington, DC area. Plus, our hotel is adjacent to the Metro, putting the entire DC area within easy reach. Whether meeting to plan your deployment or celebrating camaraderie years later, you can count on Bethesda North Marriott to bring your group together.

To start planning your next meeting or event, please call 301.822.9200 or visit BethesdaNorthMarriott.com.

BETHESDA NORTH MARRIOTT HOTEL & CONFERENCE CENTER
5701 Marinelli Road, Bethesda, MD 20852
Phone 301.822.9200

Marriott
BETHESDA NORTH
HOTEL & CONFERENCE CENTER

© 2012 Marriott International, Inc.

Riot Control 101

By MG Guy S. Meloy
U.S. Army retired

In early 1980 the Cuban economy was going from sad to pathetic. Encouraged by relatives in Florida, many small groups of Cubans were evading police to flee the island, while others were clamoring at the gates of friendly embassies seeking asylum. Surprising everyone, in April Fidel Castro removed his armed guards from the gates of the Peruvian Embassy, and by the following day more than 10,000 Cubans seeking asylum had jammed the embassy. Later that month, Cuban exiles in Florida (apparently with the quiet acquiescence of the Castro government) were able to charter small boats and succeeded in bringing relatives to the United States from the Cuban port of Mariel. Word spread quickly, and the exodus became a stampede. By late September more than 120,000 Cubans had fled Cuba for the United States. Since the majority departed Cuba through the port city of Mariel, they became known by the media as "The Mariel Boat People."

While the Carter Administration welcomed the Cubans with "open hearts and open arms," the State Department and Coast Guard were not prepared for that many refugees and tried unsuccessfully to stop the boats. As the situation became more and more complicated and the number of Cuban refugees grew by the day, the United States turned to the military to organize and operate three refugee camps, one of which was at Fort Indiantown Gap, Pa., a National Guard installation.

BG Grail L. Brookshire, the assistant division commander of the 4th Infantry Division (Mechanized) at Fort Carson, Colo., was assigned command of the refugee camp established at Fort Indiantown Gap. He faced a series of major problems not taught at the Command and General Staff College or even the U.S. Army War College.

His first hurdle was to form a cohesive staff composed of federal agencies that did not necessarily agree with the functions, responsibilities or policies of other agencies, and in many instances were unable to clear immediately needed decisions without first seeking approval from Washington. Moreover, while the Pennsylvania National Guard commanded Fort Indiantown Gap, under the circumstances Brookshire was the de facto camp commander. Fortunately, the Pennsylvania National Guard soldiers went out of their way to assist and cooperate, so he wisely asked the National Guard camp commander to be his deputy. That was a relatively simple and efficient arrangement that worked well.

When he assembled the others on his "staff," however, he found a hodgepodge of representatives from the Federal Emergency Management Agency (FEMA), State Department, Immigration and Naturalization Service (INS), Public Health Service (PHS), the Federal Protective Agency (FPA), Federal Bureau of Investigation (FBI) and the Pennsylvania State Police. Individually these were talented, experienced and dedicated professionals in their respective fields, but collectively they were a group with different agendas, conflicting experiences and different ways of doing day-to-day business. Brookshire was helped by a command-and-control element from First Army Headquarters at Fort Meade, Md. To secure U.S. government equipment (with no police powers over the refugees) he was aided by an ad hoc MP company formed from two MP battalions. The challenge of developing a cooperative, functioning, efficient staff and operational organization was monumental, and that's an understatement.

His next hurdle was one of sheer numbers: FEMA and the INS were required to process thousands of refugees, many of whom were illiterate. To compound the problem, almost 3,800 were subsequently identified as hardened criminals, whom Castro had infiltrated intentionally (in many cases forced to leave) with the Mariel Boat People to

rid his prisons and Cuba of what he termed undesirables.

Over the summer of 1980, almost 20,000 Cubans were processed through Fort Indiantown Gap, but it wasn't easy or necessarily a pleasant experience. First, processing out of the camp was time-consuming. Before any of the refugees could be released they had to be interviewed by the INS, pass a physical by the PHS, pass background checks by INS investigators and the FBI, and then finally have a sponsor—and oftentimes sponsors were hard to find. This meant that despite efforts to provide meaningful camp life, there were weeks of boredom.

By early June, disorders and destruction of property were beginning to occur as the Cubans expressed their frustrations with the length of their stay. This played into the hands of the criminal element. Frustration and boredom led to mischief, and mischief led to hardened criminals taking advantage of the situation by trying to take over the camps and run them internally by fear. Soon there was open hostility towards the U.S. agencies attempting to process and move the remaining refugees from the camps. As the slow process of screening and then finding sponsors continued throughout the summer, riots of varying degrees occurred at all the refugee camps.

The barracks areas at Indiantown Gap were organized in a way that facilitated opening and closing barracks as the refugee population increased or decreased. Brookshire's limited powers of police, however, made it difficult to identify troublemakers or punish refugees for crimes within the camp. While Brookshire received excellent cooperation from the local and state police, neither they nor the MPs had police power within the camp, as that power was delegated exclusively to the few agents of the Federal Protection Agency.

As time passed, the Cubans became less respectful of camp rules, and unauthorized absences from assigned areas became common. This problem was complicated even more by the questions of using troops to confine civilians and the legal status of the refugees. In short, there was no way to punish crimes committed within or against the refugee population.

By early August, almost 6,000 refugees were still at Fort Indiantown Gap, and of these the criminals formed a large percentage of the population. A confrontation between this element and the FPS escalated to a full-scale riot involving almost 500 refugees. Mess halls were looted and damaged, windows were broken, fires started, and vehicles vandalized. The local TV stations gave the rioters a larger stage, which was fine with them: Damage and destruction increased.

At that time I was the commander of the 82nd Airborne Division. At about 2:00 P.M. on August 6, I was called by the XVIII Airborne Corps commander, who told me he had just been called by Forces Command (FORSCOM) and that I should "deploy a battalion ASAP to Fort Indiantown Gap to suppress the rioting. Aircraft station time at Pope (Air Force Base) is 1600. Any questions?"

"No, sir."

The 82nd practiced riot control for a

week every year. The troops were familiar with riot-control equipment, the several riot-control formations, rules of engagement and the legal aspects of riot-control duty. I was confident that whatever battalion we selected to go to Indiantown Gap would do a good job, but the battalion most available from the standpoint of training schedules and other commitments was the 1st Battalion, 504th Airborne Infantry, so I selected that battalion.

The battalion commander, LTC Donald (Rock) Hudson, was as strong and solid as his nickname. He was smart and innovative, and he had great judgment and uncommon common sense. I called his brigade commander, explained the mission, said I'd like to send the 1st of the 504th to Fort Indiantown Gap and asked if he had any problems with my selecting that battalion. He agreed it was a good choice, so I asked him to alert the 504th and then meet me at Rock's headquarters in 15 minutes.

When I got to Rock's battalion, I could see preparations were already under way. Rock and the brigade commander were waiting for me in front of his headquarters. I told Rock, "Apparently some of the Cubans at Indiantown Gap are rioting and have been for a few days. I understand it's getting worse. FORSCOM has directed the 82nd to send a battalion to suppress it. So that's your mission. When you get there report to BG Brookshire. He'll be your boss as long as you're there. I'll call him and let him know you're on the way so he'll be expecting you. Any questions?"

"No, sir, the S4 is at the contingency warehouse now to draw riot-control gear. All my company commanders are aware we are going to riot-control duty and gearing up accordingly, and I don't foresee any problems making the 1600 station time at Pope."

I asked Rock to give us a situation report the next day whenever he had time to send it, wished him good luck, shook his hand and returned to my headquarters, where I called Brookshire to identify the battalion and the name of the battalion commander.

The next morning at about 11:00 A.M., Rock called to tell me, "Sir, it looks like the riot's over. Everything is under control. BG Brookshire has asked us to stay for the next few days to be sure it doesn't kick up again and to help with compound searches and security. We have already coordinated with the Pennsylvania National Guard, and they've agreed we can use some of their tactical ranges for training. I don't foresee any more trouble, but you never know. I figure we'll probably be here for at least another week before we can return to Bragg."

I asked Rock, "Did you have to get tough, anybody hurt, any injuries to your guys or to the Cubans?"

He replied, "No, sir, no one on either side hurt at all."

Curious, I asked, "How did you stop the rioting so soon?"

He replied, "Simple, sir, all we had to do was just run around the barracks area a couple of times, and that quieted everything down real quick."

I called Brookshire and asked how much longer he wanted the 504th at Indiantown Gap. "If everything remains calm I anticipate a few more days, but no longer than a week."

I told him, "I'd like to come up and visit the troops, so I'll plan on being there sometime tomorrow—looking forward to meeting you and finding out what Rock meant when he said they stopped the riot just by running around the barracks."

Brookshire said, "Well, that's exactly what he did, too."

The next afternoon I visited Rock and his staff. Rock explained his method of "riot control" this way: "I formed the battalion in the street early the first morning we were here. I had them wear the standard 82nd PT [physical training] uniform of white shorts, T-shirts with the division crest, and their jump boots. I added a couple of extra things like rucksacks stuffed with pillows to look as if they were full of assorted riot-control items, and every man, including the staff and I, carried riot batons at port arms. I told the battalion that we were going to run around the barracks where the riots were taking place, but that as we ran [there would be] no counting cadence, no 'Jody songs.' Do not look left or right, eyes straight to the front and, especially, do not look at the compound or any Cubans. We will run around the refugee barracks area twice. All I want to hear are boots pounding the pavement. Not another sound."

As it started to turn daylight, roughly 650 paratroopers in company mass formations began running towards the Cuban barracks. At first the Cubans could only hear a faint, strange and unfamiliar noise as 650 pairs of jump boots pounded the pavement from a distance, but as the battalion got closer and closer to the Cuban barracks, the sound of the boots became louder and louder. Confused and to an extent bewildered, the Cuban troublemakers still did not know what the sound actually was—that is, until the first unit of the battalion, led by Rock and his staff, came into view: 650 silent men all carrying batons and rucksacks stuffed full with who knows what, looking straight ahead, and ignoring the Cubans inside the barracks compounds, the only noise being the unique, attention-getting sound of all those boots striking the pavement in unison. The Cubans watched with open jaws, looking nervously at one another as the battalion circled the barracks twice. They were so intimidated that none spoke; they just stared. Given the sight of that many troops—all obviously in great physical shape and well trained—there was an immediate, silent, mutual agreement among the Cuban troublemakers: end of riots.

While there are several lessons to be learned from this event, one stands out above all others: mainly the value and advantages of senior commanders issuing mission-type orders to subordinate commanders. Recall my guidance to LTC Hudson before he departed For Bragg. In essence all I said was "There's a riot at Indiantown Gap; your battalion has been selected to squelch it; planes leave in two hours." I did not say or imply how to do it or what to do it with. I only said what his mission was and why. Two important words were critical: *what* (the mission clearly defined so the subordinate commander had no question of what he was supposed to accomplish) and *why* (the purpose, because understanding the purpose gives meaning to the *what*). I left i

entirely up to Rock to size up the situation on the spot and decide the *how*. To be frank, I doubt it would have ever occurred to me to handle the riot with such an intimidating, immediately effective show of force as Rock did.

I was fortunate to be able to serve under several commanders who also issued only mission-type orders. For example, in July 1966, COL Thomas M. Tarpley, then the commander of the 2nd Brigade of the 25th Infantry Division in Vietnam, came to see me less than two hours after I had assumed command of the 1st Battalion, 27th Infantry. He said, "Meloy, move the battalion to Trang Bang tomorrow morning. It's crawling with VC [Viet Cong]. We need to clear them out of the district. Plan on staying there a while. By the way, the district chief is named Nghiep, and he is suspicious of Americans. Any questions?"

With a smile I asked, "Yes, sir, just one. Where's Trang Bang?"

He laughed, pointed to the west and said, "It's that way. Good luck," and walked away.

In my mind, the *how* is an inherent command prerogative of the commander executing the mission, not the commander who conceived or ordered the mission. Sure, if his boss wants to provide increasingly specific commander's guidance or a point-by-point detailed concept of operations, or if he would like a back-brief to learn how the subordinate commander intends to carry out his mission, that's also his prerogative. On the other hand, if he goes into the details of specifying which battalion or company should do this or that and how they should do it (as one of my bosses in Vietnam once started to do before I balked), while that's also the boss' prerogative, it's a lousy way to develop subordinate commanders, it's a lousy way to indicate confidence in subordinates, and it is the wrong way to develop a happy and effective climate of command. Even more important, it stifles innovative solutions that often accomplish the mission faster and more efficiently than the boss himself might consider.

I am a firm believer in the advice I once received from BG Jack Burton. During my second Vietnam tour, when I commanded the 1st Battalion, 12th Cavalry, 3rd Separate Brigade, 1st Cavalry Division, he was my brigade commander. He was also a strong believer and practitioner of not interfering with my command prerogatives, and he thought that if he ever felt he needed to, it was probably best for both of us if I looked around for a different commander. It never occurred to me to look around for different commanders in the 82nd, and particularly a different commander for the 1st Battalion, 504th Airborne Infantry. □

***MG Guy S. Meloy**, USA Ret., served in various command and staff positions over the course of his Army career. He commanded four platoons, three companies, two battalions—one for six months as a major, the second for 12 months as a lieutenant colonel, both in Vietnam—and a brigade. He was an assistant division commander and commander of the 82nd Airborne Division as well as director of training in the Office of the Deputy Chief of Staff for Operations and Plans.*

USAREUR at the Vanguard of Multilevel Multinational Engagement

BOOTS ON THE GROUND:

VITAL IN PEACETIME, TOO

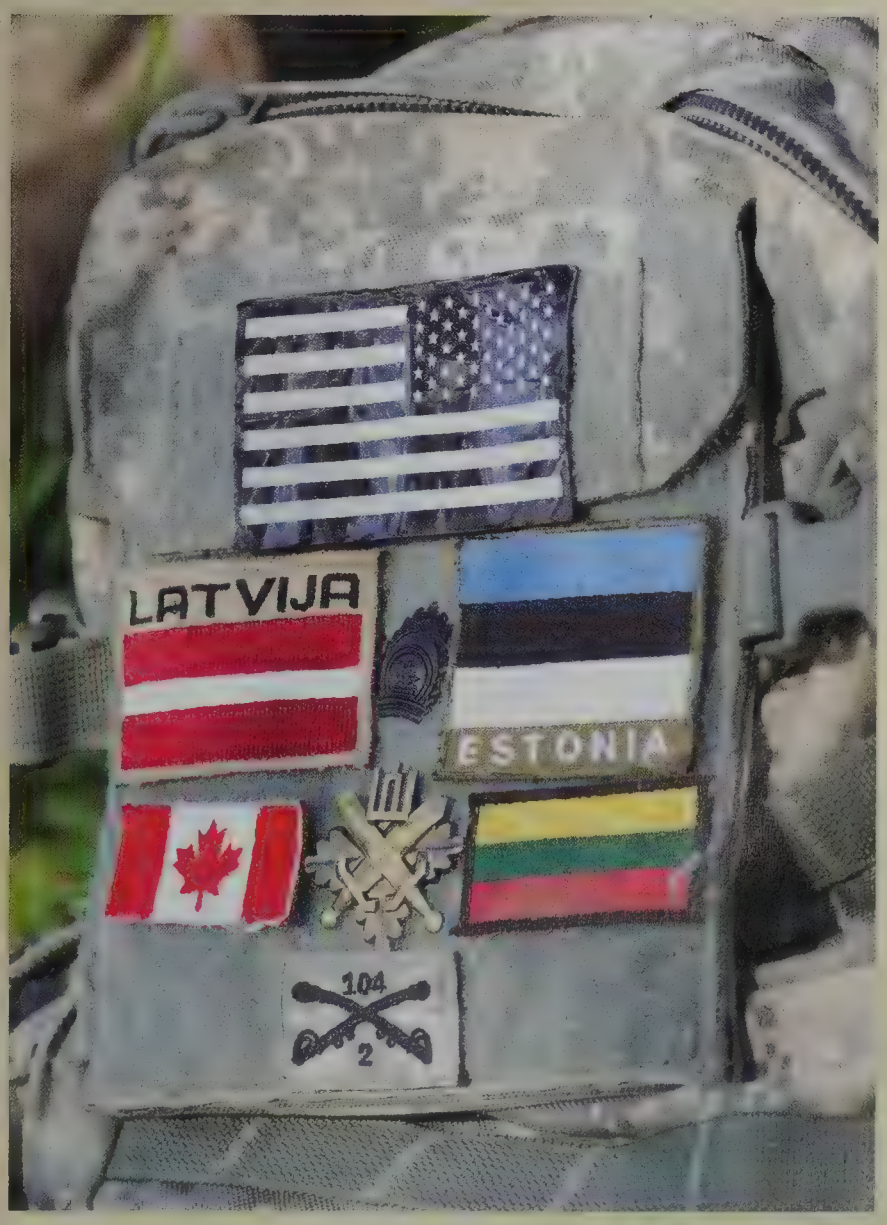
The dim cargo bed of a Lithuanian military truck served as the unlikely nexus of U.S. military strategy as it applies to foreign military engagement and multinational training, but as raindrops thudded against the cargo bed's taut cover on the first day of exercise Saber Strike 2012's situational training phase, there was no better example of the exercise's purpose.

Saber Strike, which focuses on the NATO partner states of Lithuania, Latvia and Estonia, is one of the premier annual joint

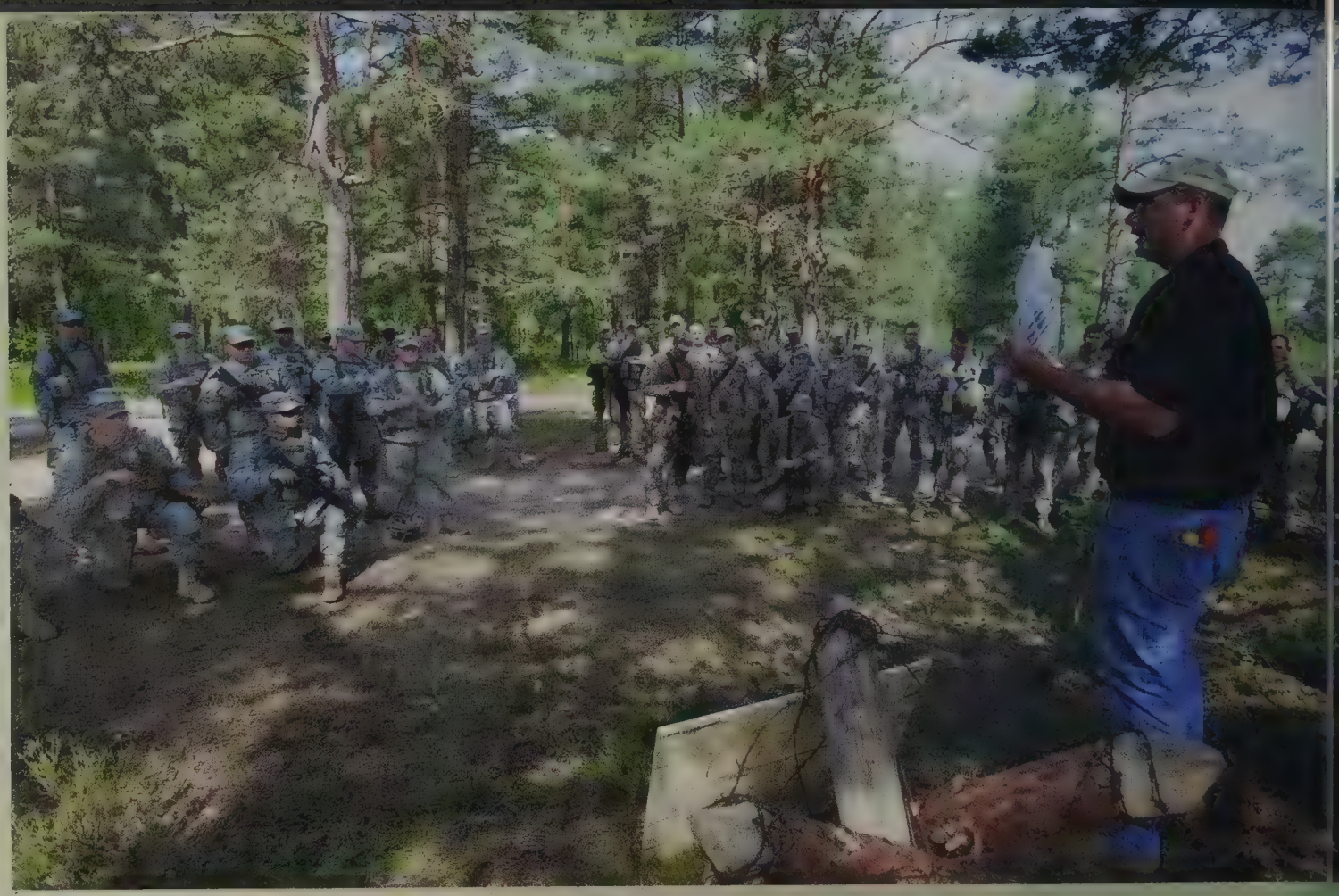
Top left, CPT Michael Adams from the Pennsylvania Army National Guard's (ARNG) 2nd Squadron, 104th Cavalry (2/104th Cavalry), 56th Stryker Brigade Combat Team, offers advice to a Lithuanian reservist during exercise Saber Strike 2012. Right, exercise observer-controller SSG Matthew Doerr from U.S. Army Europe's (USAREUR) 3rd Squadron, 2nd Cavalry Regiment, reviews a situational training event with a Latvian platoon leader.

A U.S. soldier from the 2/104th Cavalry maneuvers alongside a Lithuanian soldier as role players pose a threat during the situational training exercise (STX) portion of Saber Strike.

Text and Photographs By Dennis Steele
Senior Staff Writer



An American soldier's assault pack displays badges and flags (Canada and Lithuania in bottom row) of five Saber Strike participants.



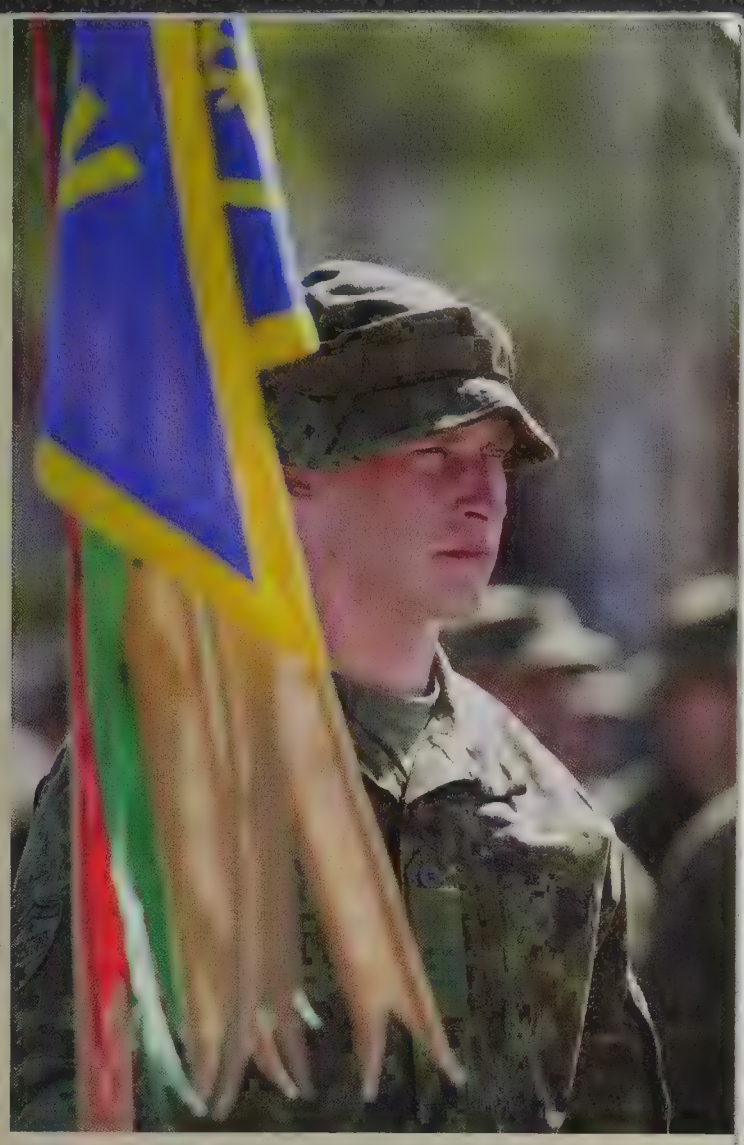
Chris Curry, a trainer from USAREUR's Seventh Army's Joint Multinational Training Command (JMTC), conducts a counter-improvised explosive device (IED) class. JMTC's training team specialties range from individual and small-unit tactical training to advanced simulation training for senior leaders.

Above, soldiers from Canada and Latvia go through an urban combat STX lane during Saber Strike. Center, Canadian soldiers from a Highland regiment wear traditional headgear during the exercise's opening ceremony.

multinational training events staged by U.S. Army Europe (USAREUR). (Canada, Finland, France and the United Kingdom also sent personnel to participate in Saber Strike making it an eight-country NATO exercise.)

USAREUR conducts or supports more than 20 multinational exercises annually and stages many other engagement events such as courses, conferences and symposia. USAREUR's exercise and training program is sophisticated and complex, but each element depends on a simple and proven formula—American soldiers directly working with international forces to build relationships and interoperability.

Under the refocused U.S. national strategy announced earlier this year, the importance of multinational training and engagement events will increase. Such events are based



Top left, Pennsylvania ARNG SGT Michael De Benedetto assists Lithuanian reserve PVT Vida Riukiene as she fires the .50-caliber machine gun mounted on his Stryker reconnaissance vehicle on the first day of Saber Strike. Top right, an Estonian soldier carries his company guidon during the exercise. Bottom left, a U.S. soldier prepares to start his Stryker vehicle.

on face-to-face encounters and rapport-building in a personal way, proving that even in peacetime, America needs boots on the ground.

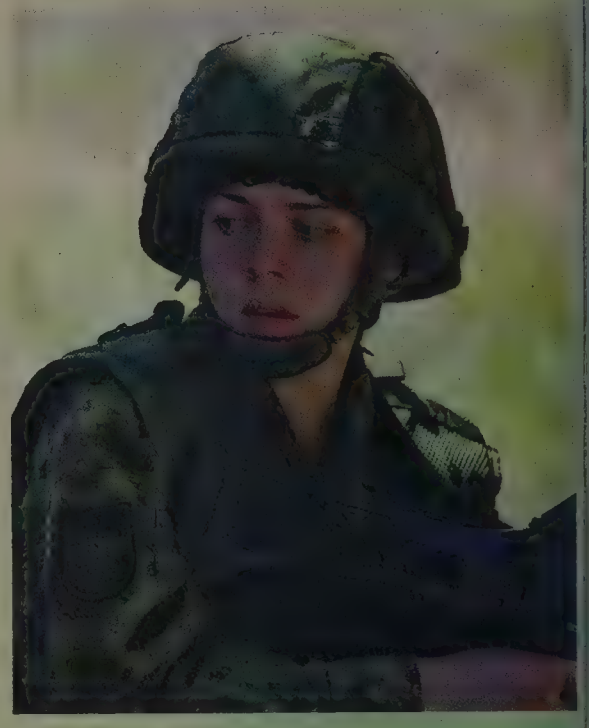
On that rainy morning in Latvia, a pair of those boots belonged to Pennsylvania Army National Guard CPT Michael Adams, who was fitting into the role of liaison officer. He is the commander of Headquarters and Headquarters Troop, 2nd Squadron, 104th Cavalry (2/104th). During Saber Strike he was attached to a headquarters company from the Lithuanian National Defense Volunteer Forces, the reserve component of the Lithuanian army, which was preparing for a deployment to Afghanistan to serve in NATO's International Security Assistance Force (ISAF) and support a provincial reconstruction team in the German army sector.

One of the purposes layered within Saber Strike is helping to tactically prepare NATO units for ISAF deployments. A Latvian regular army company also was training for an ISAF rotation during the exercise.

A composite platoon from 2/104th Cavalry, 56th Stryker Brigade Combat Team, 28th Infantry Division, was partnered with the Lithuanian company during Saber Strike. Lithuania and Pennsylvania are paired under the National Guard's State Partnership Program, which had its start in the three Baltic states more than 20 years ago as Latvia, Lithuania and Estonia regained their independence. The program now extends to more than 60 countries worldwide, and USAREUR uses assets under the program to bolster its training/engagement program. In Europe, 27 countries are partnered with 27 states.

CPT Adams sat on a bench inside the truck listening to radio chatter from the Lithuanian and U.S. platoons. Lithuanian PVT Vida Riukiene operated the company radio, responding to calls from platoon leaders and relaying messages to the exercise control cell in "NATO English" (serviceable general English comprehension laced with an

Right, CPT Daeius Vizinis, commander of the Lithuanian company participating in Saber Strike, receives firing limit instructions. The Lithuanian company was training for an upcoming deployment to NATO's International Security Assistance Force (ISAF) in Afghanistan. Below, SGT Brandon Shoemaker gets instruction on the Carl Gustav recoilless rifle from a Lithuanian NCO.



understanding of military-specific terminology). When PVT Riukiene got stuck on a word, CPT Adams came to her rescue.

While coordinating with the American side, his job—as he saw it—was to be available to the Lithuanian company's leadership, the commander and executive officer, answering their questions, mentoring when it was appropriate and butting out of their business when that, too, was appropriate.

One of the higher-level strategic objectives of all multinational missions relates to the area of "assurance"—that a U.S. presence at routine training events, for example, builds trust among allies that the United States will also show up when the alarm bells are ringing.

RFF is the acronym for request for forces, which a U.S. theater commander would use when asking for additional troops to respond to a contingency. As LTG Mark P.

Center right, a Lithuanian soldier goes through the urban combat STX lane during Saber Strike. Right, a Latvian soldier responds to a situation on the counter-IED STX lane.

ARE YOUR TRAINING DOLLARS SHRINKING?

The Answer: Simulation – as a Service

No doubt, training budgets are shrinking and today's leaders are looking for cost effective ways to accomplish their mission. Raydon Corporation introduces **"Simulation – as a Service" (SAAS).** The same great solutions, the same World Class Training, now in a new delivery system.

WHEN YOU THINK OF TRAINING, THINK

RAYDON

SIMULATION - AS A SERVICE

Your Terms - Your Service - Your Budget

GSA Advantage!®
www.gsaadvantage.gov

www.raydon.com
386.267.2936

©2012 Raydon Corporation. All Rights Reserved. U.S. Army photo by Sgt. Teddy Wade/Released

Right, SSG Quentin Hoover, a 2/104th Cavalry squad leader, offers tactical advice to a Lithuanian platoon leader. Center, CPT Adams listens to a suggestion from his Lithuanian counterpart. Bottom, 1LT Byron Stouffer, a 2/104th Cavalry platoon leader, goes over plans with Lithuanian CPT Dazius Sezenas.

Hertling, the USAREUR commanding general, often reminds his staff: "You can't RFF trust."

LTG Hertling means, of course, that trust must be built long beforehand and at all levels of command structures. Trust-building, therefore, is an important component of USAREUR's multinational engagements, and trust takes root at the personal level. CPT Adams was proving that in the back of the rain-splattered truck.

The truck was the Lithuanian company's mobile command post, and it was parked on a fan of damp sand that extended from the berm of a live-fire range in the training area of Camp Adazi, Latvia, which is the largest training area in the Baltic states and traditionally hosts the situation training exercise (STX) and field training exercise (FTX) portions of Saber Strike. The exercise's command post exercise (CPX) elements were held in Estonia this year.

Vestiges of the past dotted the Adazi training area—dank bunkers, tumbledown buildings, jagged shards of concrete signs and eroding sumps of foxholes and tank fighting positions, all of which were constructed during the Soviet occupation of the Baltics. Adazi Base served as a Soviet armor brigade's camp throughout most of the Cold War.

The American and Lithuanian soldiers had been together for little more than a day and the fit was already comfortable. It was apparent that the Lithuanian troops liked CPT Adams.

PVT Riukiene drew a cartoon character between radio transmissions. Adding the day's date and the greeting "Best Wishes from Lithuania" to the bottom of the drawing, she handed it to CPT Adams and said, "This is for you."

As he thanked her, a big, gregarious Lithuanian platoon leader clamored into the back of the truck and started rooting around in his pack, eventually hauling out a big hunk of smoked bacon and whipping out a particularly large combat knife to carve off generous slices, which he handed out all around. "From home," he told the American captain.

When the lip-smacking was done, CPT Adams asked for the radio handset and called the American platoon sergeant. "How much ammo have you got left?" (The U.S. Stryker platoon was conducting live-fire training with its vehicle-

I WILL ALWAYS PLACE THE MISSION FIRST.
I WILL NEVER ACCEPT DEFEAT.
I WILL NEVER QUIT.
I WILL NEVER LEAVE A FALLEN COMRADE.

BRINGING MORE POWER TO THEIR MISSION

Army troops in the fight for freedom deserve the best support we can offer. The Army's Improved Turbine Engine Program (ITEP) will make sure they get it, specifying new combat performance, capability and efficiency standards for Black Hawk and Apache helicopters. ATEC's HPW3000 engine will provide increased power, enhanced dependability, rapid start capability, increased payload, and improved high/hot performance. With greater range. Burning less fuel. Saving millions of dollars.

ATEC

Honeywell

Pratt & Whitney
A United Technologies Company

Below, SFC Matthew Morgan readies his Stryker vehicle for movement during Saber Strike. Right, a Latvian army reserve soldier receives instructions during the field training portion of the exercise. Bottom, Lithuanian soldiers help a simulated casualty aboard an American Stryker.

mounted weapons on the range next to the Lithuanian company.) Upon receiving the answer, he told the platoon sergeant to shut down the training, load the remaining ammo into the back of a Stryker and roll it over to the Lithuanian side.

"You want to shoot our guns?" CPT Adams asked the lieutenant. Beaming, he replied, "Ohhhh yeah!" It was the Americans' "from home" offering.

The Lithuanians lined up and one by one rattled a healthy burst through the American .50-caliber machine gun, and deciding that wasn't enough, gathered all the magazines they could find and let several American troops fire their brand new Heckler and Koch service rifles. They then piled up training rounds for their Carl Gustav recoilless rifles and conducted a makeshift class on the weapon's operation for the American guardsmen.

Before the day was done, each side had shot pretty much everything the other side had, and they were all shaking each other's hands and having a good time in the aftermath of a soggy rain shower. It all had started with a drawing and a hunk of smoked bacon in the back of a truck—the first step toward building the kind of trust that you just can't RFF.

The U.S. Army will be increasingly engaged in building relationships and trust with foreign armies under the post-Iraq/Afghanistan conflict strategic guidance that emphasizes "strengthening alliances and partnerships across all regions." The guidance, released last January, stated, "Whenever possible, we will develop innovative, low-cost, and small-footprint approaches to achieve our security objectives, relying on exercises, rotational presence and advisory capabilities."

The guidance included such missions among the priorities set as military planners looked at the way forward to sustain U.S. global leadership, stating, "U.S. forces will conduct a

ALIVE

BECAUSE IT'S NOT JUST YOUR JOB, IT'S YOUR LIFE.

Enhanced perception & awareness can save lives. FLIR continues to pioneer innovative search & rescue sensor systems that enable you to see the unseen. When lives are at stake you need clear, accurate information you can trust.

FLIR®

Above, Estonian soldiers use their Humvee to enter a building on an urban combat training site. Right, U.S. soldiers cover the flank of their Lithuanian counterparts during training. Below, CPT Adams (right) answers questions from Lithuanian soldiers during a training break.

sustainable pace of presence operations abroad, including rotational deployments and bilateral and multilateral training exercises. These activities reinforce deterrence, help to build the capacity and competence of U.S., allied, and partner forces for internal and external defense, strengthen alliance cohesion, and increase U.S. influence."

Standing in the sand of the Adazi live-fire range as U.S. A-10 aircraft made gun runs and dismounted Latvian troops peppered targets with small-arms fire, LTG Hertling noted that the strategic guidance emphasis on building partnerships has been USAREUR's emphasis for many years.

Concerning USAREUR, the commanding general said, "It's not the way forward because we've been building partnerships for a long time, but it's the way we MUST continue. We've been doing exercises with a lot of forces over the last 10 years, and it has built all of our European allies to the point where they can fight."

Using the Baltic states as examples of progress over that decade, he added, "Because of the progress they've made, they have a good, capable military. They still need assistance in the enablers—joint tactical air controller (JTAC) training, engineers, intelligence—and now we're getting to those pieces. So, the multinational exercises we do along with the multinational training—because it's more than exercises, we have to train these guys first, and those are two different things—cause them to have a pretty capable military and fight above their weight class."

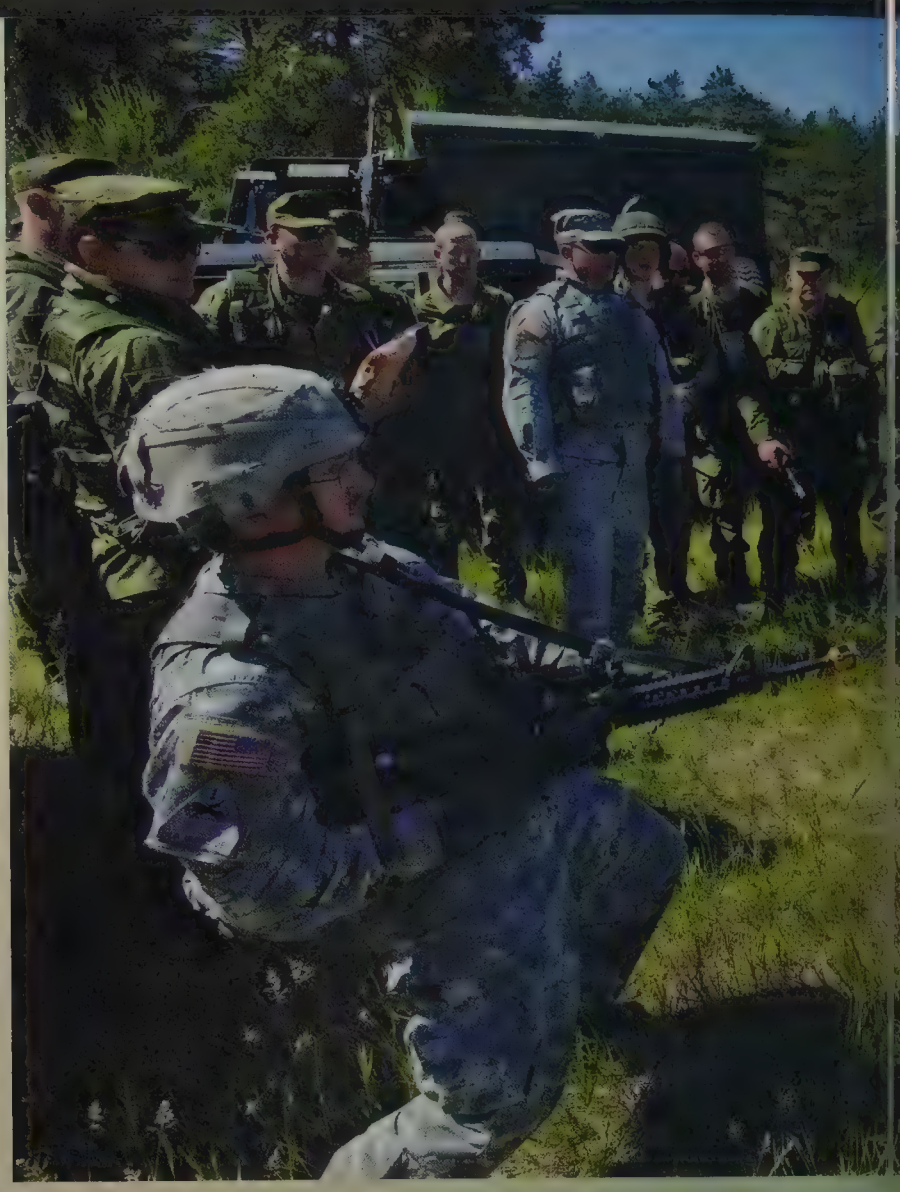
LTG Hertling added that the work done by USAREUR in the past, particularly with the former Soviet Bloc countries that are now NATO members, has resulted not only in improving military capabilities for those countries but also in creating some of America's best allies from what had been potential enemies.

"These are the guys who are with us in Afghanistan," he said.

"One of the points that I continue to try to make with anybody who says we're still fighting the Cold War is by saying, 'Seriously, have you been over here lately? Do you see what kind of Cold War is here? All the people we were prepared to fight against are now on our side, and, in fact, are providing [many of] the forces that we're using in Afghanistan.'"

LTG Hertling continued, "The figure I use is: Of the 40,000 [non-U.S.] ISAF forces in Afghanistan, 91 percent of them come from Europe. They have to train before they get to combat, and they train and exercise with us. That's the criticality of U.S. Army Europe."

AH-6
ARMED AERIAL SCOUT
ONE SCOUT LEADS THE PACK.
The AH-6 Light Attack/Reconnaissance Helicopter offers superior capability for the Army's Armed Aerial Scout mission. The most advanced integrated cockpit. Commonality with the Army's Apache Block III helicopter. Flexible weapons configuration with four pylon stations. Networked, including UAS connectivity. And with a full mission load, it's demonstrated hover-out-of-ground-effect above 6k/95° F. Capability ahead of the pack. That's AH-6 AAS.
BOEING



Above, a Latvian army convoy stops to assess an IED threat during Saber Strike. Right, SGT Bradley Herron, 2/104th Cavalry, goes on patrol with the Lithuanian reserve company. Below, a Lithuanian radio operator checks in with her squad leader.

SSG Hoover (left) and SGT Herron demonstrate a rifle technique for the Lithuanian company. Right, a Lithuanian platoon leader assesses a training situation.

The general indicated that USAREUR approaches partnership and trust-building in a holistic manner, providing an overarching orchestration element that uses the command's organic assets and assets such as those currently provided by the State Partnership Program. That function will remain critical in the employment of rotating training units that could be provided for multinational exercises in the future as USAREUR forces are downsized.

"We plan the exercises. We conduct the training at the Joint Multinational Readiness Center. We provide the training support facilities in the different countries. Our guys are force multiplying training. USAREUR controls and pulls it all together. … That's where USAREUR contributes. It's a very intricate choreography of many different organizations," LTG Hertling explained.

USAREUR has endured significant force reductions in the past several years. The division headquarters and their tactical formations previously assigned to USAREUR have returned to the United States, leaving the 21st Theater Support Command as the only remaining two-star command under USAREUR. USAREUR's V Corps headquarters will be inactivated after it completes its current ISAF deployment, and under current force-cut plans, USAREUR also will lose two of its brigade combat teams (BCTs) as the 170th and 172nd Infantry BCTs will be eliminated, leaving USAREUR with only two ground ma-

A Latvian army scout prepares for a mission during Saber Strike.

Above, members of USAREUR's 160th Forward Surgical Team treat a mock patient during a mission rehearsal exercise conducted during Saber Strike. The team soon will deploy to Afghanistan. Right, Americans and Lithuanian team members participate in a tug-of-war contest during the exercise's games day. Below, an Estonian soldier shouts commands.

neuver BCTs: the 2nd Cavalry Regiment (Stryker) based in Germany and the 173rd Airborne BCT based in Italy.

The USAREUR commander said that the command can still accomplish its multinational training and engagement mission with the impending reductions, but he cautioned against imposing further reductions as more cuts could undermine the efforts.

"When the training packages fall apart," LTG Hertling said, "then you don't have the allied support for operations as we have in ISAF. They didn't get there on their own; we were the ones who helped them do that.

"We will still have a significant-size force over here when those two brigades eventually leave; we will still have 30,000 soldiers here in Europe. It's going to be tight in terms of continuing the kinds of things we need to do, but we can do it after Afghanistan rolls down a little bit more. But it is something we must continue to do or we are going to lose the alliance capabilities. We are an economy-of-force effort here in Europe right now, and I think we're contributing significantly to the training of other countries."

USAREUR's area of responsibility (AOR) covers 51 countries across an expanse that stretches from the Black Sea to the Atlantic Ocean and from the Scandinavian ice cap to the Mediterranean, including Israel and Turkey. The Iron Curtain once marked its eastern boundary and defense line during the Cold War, but with the breakup of the Soviet Union two decades ago, many of the former Soviet Bloc countries are now partner nations that, like Latvia, Lithuania and Estonia, made the hard climb to NATO membership. *(continued on page 50)*

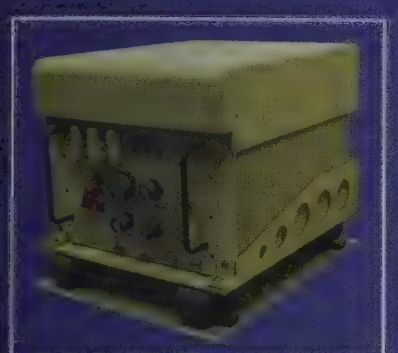
IED protection that goes wherever you go.

The IED threat is always there. And with CREW Duke, so is your protection against it. Invented by SRC and manufactured by SRCTec, this is a tactically superior, state-of-the-art jamming system that gives you:

- Simple operation with minimal power requirements
- High reliability and optimal performance
- Most widely fielded CREW system
- Innovation worthy of the Army's Top 10 Greatest Inventions Award

So when you're in the field, your best protection is right there with you.

To find out more, visit **www.srcinc.com/CREWDuke.**



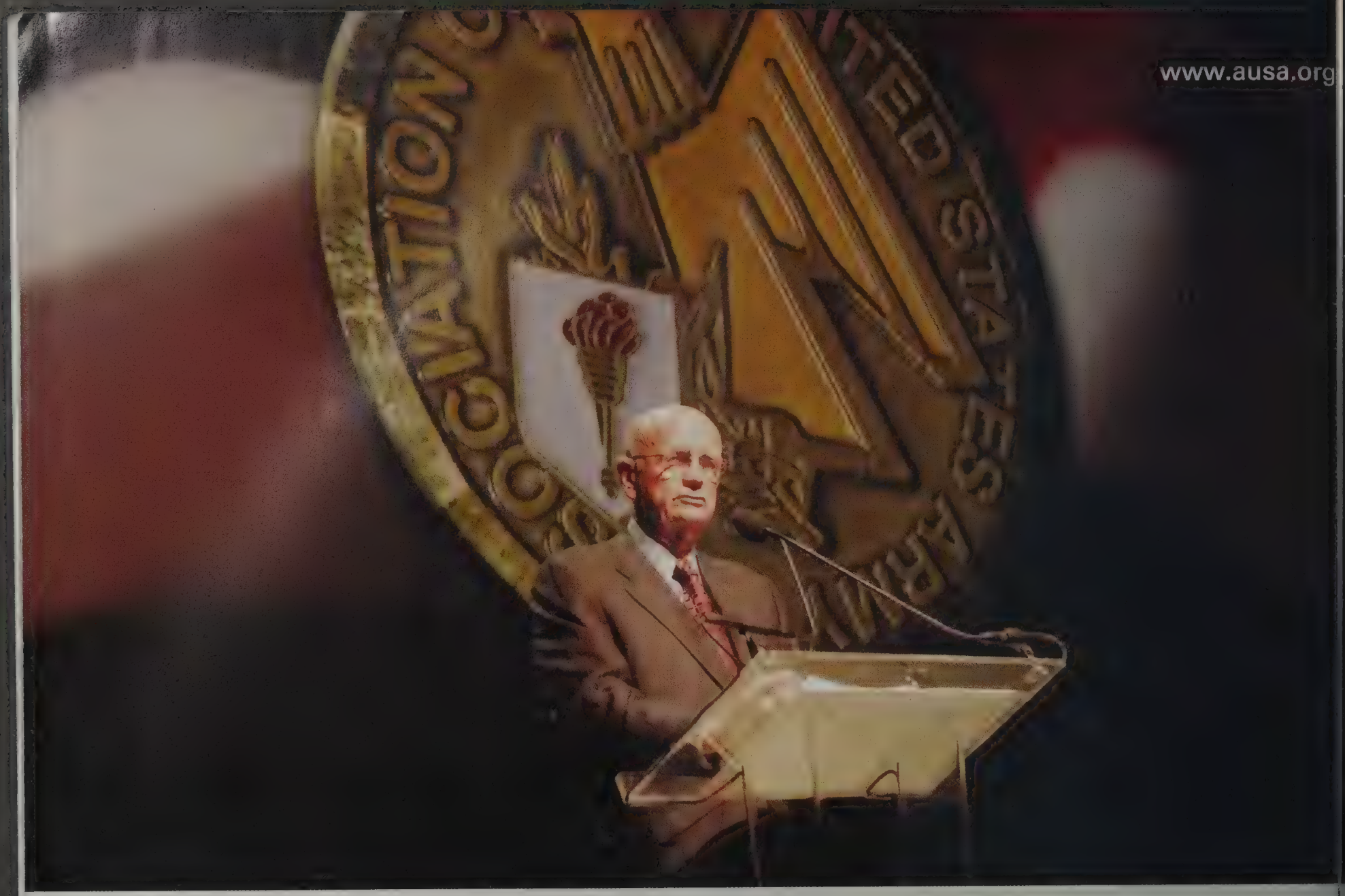
CREW Duke

Redefining possible

SRC

Defense • Environment • Intelligence

© 2012 SRC, Inc. All rights reserved.



Over 650 of the world's leading defense companies are members of the AUSA Sustaining Membership Program. Is yours?

The Association of the United States Army's (AUSA) Sustaining Membership Program is your vital link to Army decision-makers at the highest levels. As the Army's professional organization, AUSA has played a role in strengthening national security for over 60 years by facilitating partnerships between military decision-makers and industry leaders.

When you join AUSA's Sustaining Membership Program, your company's executives will have the opportunity to share ideas with top Army officials at AUSA events. These events are conducted and attended by high level Army decision-makers, DoD officials and industry leaders – the individuals who are setting the agenda for the Army's future!

Join us today and discover what the AUSA Sustaining Membership Program can do for your business.

AUSA Sustaining Membership Program:
Supporting the Army–Industry Partnership

Association of the United States Army
2425 Wilson Boulevard • Arlington, VA 22201 • (703) 841-4300 ext. 2665 • www.ausa.org

AMERICA'S ARMY:
SERVICE TO THE NATION, STRENGTH FOR THE FUTURE

ASSOCIATION OF THE UNITED STATES ARMY

2012 AUSA
ANNUAL MEETING AND EXPOSITION

A Professional Development Forum

22-24 OCTOBER 2012

Walter E. Washington Convention Center, Washington, D.C. | www.ausa.org

2012 AUSA
ANNUAL MEETING AND EXPOSITION
A Professional Development Forum

America's Army: Service to the Nation, Strength for the Future

Located at the Walter E. Washington Convention Center in Washington, D.C., AUSA's Annual Meeting will host over 600 exhibits and 35,000 attendees. The Convention Center is located at Mount Vernon Square (between 7th and 9th Streets, at New York and Massachusetts Avenues) and is convenient to the Mount Vernon Square Metro station and within walking distance of four other stations (Gallery Place, Metro Center, McPherson Square and Federal Triangle). More information can be found at www.dcconvention.com.

The Renaissance Washington, D.C. Hotel is AUSA's headquarters hotel. There will be other hotels providing additional rooms within walking distance and with a wide variety of rates and room selections. Registration information for members and additional housing information is available on the Association's web site at www.ausa.org.

PREVIEW OF EVENTS

28th Annual Army Ten-Miler

LEAD SPONSORS – AUSA AND KBR

Sunday, 21 Oct., 0800. The Army Ten-Miler will start at the Pentagon.

This year the Army Ten-Miler – A Tradition of Excellence – is celebrating its 28th anniversary as the Army's premier athletic event. Hosted by the United States Army Military District of Washington, the Army Ten-Miler with 30,000 runners and over 800 teams, continues to be one of the best races in America. Thousands of military and civilian runners from all 50 states, Korea, Canada, Germany, the United Kingdom, and Brazil are expected to participate.

Proceeds from the race benefit the Army's Morale, Welfare and Recreation Program. This program supports Soldiers and their families.

SPONSORS

- Major Sponsors: GEICO®; Health Net; PWC; DRS Technologies; NAVISTAR® Defense; and Navy Federal Credit Union®.
- Supporting Sponsors: G&G Outfitters, Inc; Marathon-Photos.com; Runcoach; and ClearanceJobs.com.
- Media Sponsors: The Washington Examiner; and ESPN 980.

For more information, visit www.armytenmiler.com, call the Army Ten-Miler office at 202-685-3361 (DSN: 325) or e-mail armytenmiler@jfhqncr.northcom.mil.

MG Robert G. Moorhead Guard/ Reserve Breakfast

Monday, 22 Oct., 0730–0900 (ticket required). This breakfast recognizes outstanding chapter efforts in support of Reserve Component Soldiers and families. GEN David M. Rodriguez, Commanding General, United States Army Forces Command, is the invited speaker.

PREVIEW OF EVENTS

2012 AUSA Annual Meeting Opening Ceremony

Monday, 22 Oct., 0930–1115. The opening ceremony, featuring The United States Army Band, "Pershing's Own," and the 3rd United States Infantry (The Old Guard), will be a patriotic pageant with the presentation of colors and an inspiring, dramatic multimedia presentation. The HON John M. McHugh, Secretary of the Army, is the invited speaker.

Corporate Member Luncheon

Monday, 22 Oct., 1230–1430. This luncheon honors the Corporate Members and their many contributions to the chapters' programs to support Soldiers and families. The luncheon will be held at the Renaissance Hotel in Washington, D.C. Tickets are required (no charge) and are available through local AUSA chapters. Seating is limited. GEN James D. Thurman, Commander, United Nations Command/Combined Forces Command/United States Forces Korea, is the invited speaker.

ROTC Activities

Monday, 22 Oct., 1230–1430. A luncheon for ROTC cadets, ROTC cadre and invited guests will be held at the Renaissance Hotel in Washington, D.C. GEN Carter F. Ham, Commander, United States Africa Command, is the invited speaker. Advance tickets (no charge) are required and are available from AUSA Regional Activities, P.O. Box 101560, Arlington, VA 22210-0860.

Army Pre-Retirement and Retiree Events

Monday, 22 Oct., 1400–1600. A seminar will be held to update retirees on the Retirement Services and the President's Federal Veterans Employment initiative.

Wednesday, 24 Oct., 0900–1100. The Department of the Army Retirement Services Office will conduct Pre-Retirement briefings on the Survivor Benefit Plan (SBP).

Wednesday, 24 Oct., 1400–1600. Federal Employment Process Workshop conducted by Office of Personnel Management.

President's Reception

Monday, 22 Oct., 1830–2015 (ticket purchase required). The President's Reception honoring the Secretary of the Army, the Chief of Staff, United States Army, and the Sergeant Major of the Army affords everyone a chance to meet the Army leadership, socialize with colleagues from the worldwide Army community and see old friends. Hors d'oeuvres and beverages will be served.

Dwight David Eisenhower Reception

Tuesday, 23 Oct., 1130–1215. A cocktail reception (no ticket required) will be held in Exhibit Halls A, B, C, D and E of the Walter E. Washington Convention Center preceding the luncheon. Attendance at the luncheon is not required.

Dwight David Eisenhower Luncheon

Tuesday, 23 Oct., 1230 (ticket purchase required). GEN Raymond T. Odierno, Chief of Staff, United States Army, is the invited speaker. The luncheon will be held in the Walter E. Washington Convention Center Ballroom.

Department of the Army Civilian Professional Development Seminar

Wednesday, 24 Oct., 0930–1130. Panelists will discuss the current challenges and issues facing government leaders as they plan for the civilian human resource requirements of the future. There will be a question-and-answer period following the panel's presentations. There is no charge for this professional development event, held at the Renaissance Hotel in Washington, D.C. Government employees are welcome.

Department of the Army Civilian Luncheon

Wednesday, 24 Oct., 1200–1400 (ticket purchase required). This luncheon will honor government civilians and recognize the regional Department of the Army Civilian of the Year award recipient. It will be held at the Renaissance Hotel in Washington, D.C.

PREVIEW OF EVENTS

Sustaining Member Reception and Luncheon

Wednesday, 24 Oct., reception beginning at 1130. This luncheon recognizes Sustaining Members for their support of AUSA and the United States Army. The HON Ashton B. Carter, Deputy Secretary of Defense, is the invited speaker. In addition, the John W. Dixon Award will be presented to a distinguished industry leader, who has made considerable contributions to America's defense. This event is by invitation only for Sustaining Members and guests.

George Catlett Marshall Memorial Reception and Dinner

Wednesday, 24 Oct., 1800–2200 (tickets required). From 1800 to 1930 refreshments will be served in Exhibit Halls A, B, C, D and E of the Walter E. Washington Convention Center. Following the reception at 2000, the 2012 George Catlett Marshall Memorial Dinner will be an impressive climax to the meeting's events. The HON James A. Baker, III, former Secretary of State, is this year's Marshall Medal recipient. The United States Army Band, "Pershing's Own," will provide entertainment. The formal dinner will be held in the Walter E. Washington Convention Center Ballroom.

Events Honoring Outstanding Soldiers

Monday, 22 Oct., 0700–0900. Soldiers and noncommissioned officers will meet with the Sergeant Major of the Army, Raymond F. Chandler III.

Monday, 22 Oct., 1230–1430. The Sergeant Major of the Army Awards Luncheon for command sergeants major, general officers, outstanding noncommissioned officers and Soldiers. Requires advance tickets (no charge). Awards will be presented to the United States Army Soldier and Noncommissioned Officer of the Year by the Sergeant Major of the Army, Raymond F. Chandler III.

Tuesday, 23 Oct., 0830-1100. The Sergeant Major of the Army's Professional Development Forum.

Wednesday, 24 Oct., 0930–1300. Outstanding Soldiers will tour Arlington National Cemetery and Washington, D.C. The buses depart at 0930 from the L Street entrance of the Walter E. Washington Convention Center. For information, contact AUSA NCO & Soldier Programs, 2425 Wilson Blvd., Arlington, VA 22201-3326, or call (800) 336-4570, ext. 2680.

The Sergeant Major of the Army's Professional Development Forum

"The Army Profession"

Tuesday, 23 Oct., 0830–1100. A question-and-answer session will close out the presentation. This event is open to all Soldiers attending the Annual Meeting.

Institute of Land Warfare Publications

ILW publications will be on display and available during exhibit hours at the AUSA Pavilion, Booth 407 in Exhibit Hall A. Educational materials published by ILW are provided free of charge.

ILW Contemporary Military Forums

The Institute of Land Warfare will host a series of Contemporary Military Forums on topics of current interest to Army professionals and AUSA members. All ILW forums will take place in the Walter E. Washington Convention Center. Go to AUSA's Annual Meeting web site (www.ausa.org) for details. All Annual Meeting attendees are welcome.

ILW Paper Presentations

Wednesday, 24 Oct., 0930–1130. The Institute of Land Warfare will host presentations and discussions of research papers selected by its editorial board for publication. Papers on subjects of national security interest will be presented by the authors. All Annual Meeting attendees are welcome.

AUSA Book Program Presentation

Monday, 22 Oct., 1300–1700. AUSA, in cooperation with the Naval Institute Press, Praeger Security International, The University Press of Kentucky and Helion & Company Limited, has sponsored more than eight books in 2012 as part of its book program. Authors will be on hand to speak about their books during the authors' presentation and will be available for book signing throughout the meeting at the AUSA Pavilion, Booth 407 in Exhibit Hall A. All AUSA books will be available for purchase (discounted for AUSA members).

AUSA Military Family Forum

AUSA's Military Family Forums allow Army senior leaders and experts in the field of family readiness to provide their views on the status of the Army Family. Through the presentation of four forums, speakers will have direct discourse with the attendees. The audience will consist of Soldiers and family members, senior spouses, family readiness group leaders, family programs managers as well as representatives from other organizations involved in supporting Army families.

AUSA Military Family Forum I

Army Families: "Our Leaders Speak"

Monday, 22 Oct., 1400–1700. Army senior leadership from both active and reserve components will provide their views on the status of the Army Family and Army Family Programs.

AUSA Military Family Forum II

Army Families: "Behavioral Health: Challenges and Triumphs"

Tuesday, 23 Oct., 0800–1100. This forum will focus on the challenges and success of various behavioral health initiatives across Army MEDCOM and TRICARE. Special attention will be placed on the experiences of family members and their efforts to increase strength and resilience within the family unit.

AUSA Military Family Forum III

Army Families: "Transitions and New Beginnings"

Tuesday, 23 Oct., 1400–1700. This forum will focus on wounded warriors and surviving family issues. Separate panels will be dedicated for each family group.

1400–1525. Wounded Warrior Families: "Strength through Transitions"

1535–1700. Surviving Families: "New Beginnings–New Strengths"

AUSA Military Family Forum IV

Army Families: "Military Children – Our Nation's Future"

Wednesday, 24 Oct., 0900–1200. Reintegration issues affecting military children will be discussed from an educational and developmental perspective. Speakers will focus on the impacts on healthy child development and best practices that are resonating with our kids in today's military family environment.

Army National Guard and Army Reserve Events

Tuesday, 23 Oct., 1000–1130. LTG Jeffrey W. Talley, Chief, Army Reserve/Commanding General, United States Army Reserve Command, will speak.

Tuesday, 23 Oct., 1430–1600. LTG William E. Ingram Jr., Director, Army National Guard, will speak.

Tuesday, 23 Oct., 1500–1700. CSM Michael Schultz, OCAR, will hold a breakout session.

Wednesday, 24 Oct., 1330–1500. CSM, Army National Guard, will hold a breakout session.

Industry and Military Exhibits

Exhibit Halls A, B, C, D and E in the Walter E. Washington Convention Center will feature over 600 exhibits. The exhibit hall schedule for the 2012 AUSA Annual Meeting is:

- Monday, 22 Oct., 0900–1700
- Tuesday, 23 Oct., 0900–1700
- Wednesday, 24 Oct., 0900–1700
- Wednesday, 24 Oct., 1800–1930 (Ticket Required) George Catlett Marshall Reception

2012 ANNUAL MEETING EXHIBITORS

(as of 27 July 201

3M Company
3M Electrical Markets Division

A

Accurate Energetic Systems, LLC
Adapx
ADS Group Limited
ADS, Inc.
AECOM Government Services, Inc.
Aerojet
Aerostar International, Inc.
Aggreko International
Agility, Defense & Government Services
AGP Defense
Aimpoint, Inc.
Air Innovations
AITECH Defense Systems, Inc.
AL-SORAG LTD
Alaska Structures
Alcoa Defense
Allen Vanguard
Allison Transmission
Alshamel Travel & Tourism - Military & Government
AM General Corporation
Amerex Defense
American Military University
American Ordnance
AMETEK Aerospace & Defense
Amphenol Fiber Systems International
AmSafe, Inc.
API Technologies
Arizona State University
Armada International
ArmaLite, Inc.
Armor Express
ArmorSource LLC
ArmorWorks
Arotech Corporation
Arvin Meritor, Inc.
Aspen Systems, Inc.
ATI Defense (Allegheny Technologies)
ATK (Alliant TechSystems)

AUSA Pavilion

AGIA Insurance
Army Ten-Miler
Army Times Publishing Company
Choice Hotels International
GEICO Insurance
Government Vacations
Helion and Company, Ltd
Naval Institute Press
Praeger Security International
University Press of Kentucky
University of Maryland University College

AUSA Family Programs Pavilion

A Backpack Journalist/GI Film Festival
American Red Cross
Armed Services YMCA of the USA
Army Fisher Houses
Army Homefront Fund
Care.com
INOVA Military to Medicine
Military Child Education Coalition (MCEC)
Military Community Youth Ministries
Military Families United
Military Family Network
NMFA
[illegible] Give a Hug
Operation Homefront, Inc.
SitterCity
Stronger Families
Tragedy Assistance Program (TAPS)
Tutor.com
United Through Reading
USO

Australian Pavilion

Automation Alley - Michigan Pavilion
AV, Inc.
Avalex Technologies, Inc.
Aviation Week
Avon Protection Systems, Inc.
AVX Aircraft Company
Aydin Displays, Inc.
Azonix Corporation

B

B.E. Meyers & Co., Inc.
BAE Systems, Inc.
Ball Aerospace & Technologies Corp.
Barco Federal Systems
Barrett Firearms Manufacturing, Inc.
Barry Controls
Bates Uniform Footwear
Battelle Memorial Institute
Bell Helicopter Textron, Inc.
Benchmade Knife Company, Inc.
Benteler Defense Corporation
Beretta
Blue Force Gear, Inc.
BlueSky Mast, Inc.
BMI Defense Systems, Inc.
BOEING
Bombardier
Bose Corporation
Breezer Holdings
Bren-Tronics, Inc.
Brighton Cromwell, LLC
BRTRC

C

C.E. Niehoff & Co.
CACI, Inc.
CAE
Camber Corporation
CamelBak Products, LLC
CAMSS Shelters
Canada: Partners in Defense
Canon (Virtual Imaging, Inc.)
Capturx
Caterpillar, Inc.
CEIA USA, Ltd.
Cejay Engineering
Ceradyne, Inc.
CGI Federal
CGSC Foundation, Inc.
CH2M HILL
Chemring North America
Chrysler LLC - Jeep Government & Military Sales
Cobham
Coges
Colt Defense LLC
Combined Systems, Inc.
Compulink
Concurrent Technologies Corporation
CONE DRIVE GEARING SOLUTIONS
Constellium (formerly Alcan Engineered Products)
Contact! Corporation
Control Solutions LLC
Crimson Trace
Critical Solutions International
Crystal Group, Inc.
Cubic Defense Applications
Cummins, Inc.
Curtiss-Wright Controls
Cyalume Light Technology

D

Daimler Trucks North America LLC
Dana Holding Corporation
Danalco, Inc.
Daniel Defense
Danner
Darley
Data Device Corporation
Datron World Communications
Day & Zimmermann
Dealers' Financial Services, LLC
Defence Materiel Organisation
Defense Daily/Access Intelligence
Defenshield, Inc.
Deployed Resources, LLC
Deschamps Mat Systems, Inc.
Dewey Electronics Corporation
Diehl Defence Holding GmbH
Dillon Aero, Inc.
Diversified Technical Systems, Inc.
Donaldson Co., Inc.
DRASH (DHS Systems LLC)
DRIFIRE LLC
DRS Technologies, Inc.
DSE, Inc.
DSM Dyneema LLC
Dynamic Animation Systems
Dynamic Defense Materials, LLC
Dynatrac Products Co., Inc.
DynCorp International

E

E.I. du Pont de Nemours & Company
EADS North America
EaglePicher Technologies, LLC
Eaton Corporation
Ecolog, Inc.
ECS Case
EIC Solutions, Inc.
Elbit Systems of America, LLC
Energizer
Energy Technologies, Inc.
Enersys
Ensign-Bickford Aerospace & Defense Co.
Esri
ESI Motion
Esterline
Explora Security
Extreme Engineering Solutions (X-ES)
Eye Safety Systems, Inc. (ESS, Inc.)

F

Faircount
FALCK SCHMIDT Defence Systems A/S
FedBid, Inc.
Federation of.German Security & Defence (GWM)
Fidelity Technologies Corporation
Finmeccanica
Firetrace Aerospace
First Command Financial Services
FK Logistic USA, LLC
FLIR Commercial Vision Systems
FLIR Government Systems, Inc.
FLUOR Corporation
FNH USA, LLC
FOERSTER INSTRUMENTS INC.
Fox Racing Shox
Fraser-Volpe Corporation

French Pavilion

G

Gannett Government Media Corporation
GATR Technologies
GE Aviation
General Atomics
General Digital Corporation
General Dynamics Armament & Technical Products
General Dynamics Combat Systems
General Dynamics Information Systems & Technology
General Dynamics Ordnance & Tactical Systems
General Electric Company
General Kinetics Engineering
Gentex Corporation
Geo Tactical Solutions, Inc.
Gerber Legendary Blades

German Pavilion

Gichner Systems Group, Inc.
Glenair, Inc.
Global Electric Motorcars
Global Fleet Sales
Accusonic Voice Systems
Glock, Inc.
GNB Industrial Power, A Div. of Exide Technologies
Golight, Inc.
Goodrich Corporation - Aerospace
Goodyear Tire & Rubber Co.
GovX
Grayhill, Inc.
Grote Industries

H

Hamilton Sundstrand Space Systems
Hammerhead Industries, Inc.
Harris Corporation
Haven Behavioral Healthcare, Inc.
HDT Engineering Technologies - Base-X, Hunter
Heckler & Koch Defense, Inc.
Hellenic Defence Systems S.A. (EBO PYRKAL)
Hendrickson
Herren Associates
HESCO Bastion Limited
High Impact Technology, LLC
Honeywell
Honeywell Safety
Horstman, Inc.
Humana Military Healthcare Services, Inc.
Hutchinson Industries

I

IAI North America
IAP Worldwide Services
IBIS Tek
IBM Corporation
Ideal Innovations, Inc.
IDS International
IHS Global, Inc.
Industrial Electronic Engineers
INEGMA FZ-LLC
Intellipower Inc.

See map inside
Open carefully. Pages are glued.

Intercontinental Hotels Group
Intertek
Intevac, Inc.
Invisio Communications
iRobot Corporation
Isodyne Inc.
Isotherm Technologies, Inc.
Israel Military Industries
Israeli Pavilion
ITT Exelis

J

JAI, Inc.
JLG Industries
John Deere Company
JP Morgan Chase
Jupiter Systems

K

K2 Solutions, Inc.
KDH Defense Systems, Inc.
Kearfott Corporation
Kentucky Trailer Technologies
Kidde Dual Spectrum
Kipper Tool
KMI Media Group
Knapheide Manufacturing Company, The
Kongsberg
Korean Pavilion
KOTRA
Krauss-Maffei Wegmann GmbH & Co. KG
KVH Industries
Kwikpoint

L

L-3 Communications
Laser Devices, Inc.
Laser Technology, Inc.
Laughing Rabbit Inc., L.R.I.
Leading Technology Composites
Leatherman Tool Group, Inc.
Leupold & Stevens, Inc.
Lind Electronics
5-hour ENERGY
Lockheed Martin Corporation
Logistics Management Institute
Logo Mat Central LLC
Lord Corporation
LRAD Corporation
LWRC International, LLC

M

Mabey Bridge & Shore, Inc.
Mack Defense, LLC
MAG Instrument, Inc.
Maintainer Custom Bodies, Inc.
ManTech
Marvin Land Systems
MasterCraft
MaxVision LLC
MBDA Incorporated
McLane Advanced Technologies
McQ
Command Arms Accessories
MEBS International
Meggitt
Mercury Computer Systems
Meridian Medical Technologies, Inc.
Michelin North America, Inc.
Michigan Pavilion
Microsun Technologies, LLC
Mifram Security
MILCOTS/901D
Military Systems Group, Inc.
Militarybyowner Advertising, Inc.
Miller-Holzwarth, Inc.
Milliken & Company
Miltope Corporation
Minimizer
Mission Essential Personnel, LLC
MMI Outdoor, Inc.
Mobile Concepts By Scotty
Moog
Motorola Solutions, Inc.
MTU Detroit Diesel

N

NAMMO, Inc.
National Defense Industrial Association (NDIA)
National Industries for the Blind
Navistar Defense
Navy Federal Credit Union
New Breed Logistics
Nobles Manufacturing, Inc.
Northrop Grumman
Northwest Territorial Mint
NOVA Electric
NovAtel, Inc.
NP Aerospace

O

Oakley, Inc.
Olin-Winchester
O'Neil & Associates, Inc.
Ontario Knife Company
Ophir Optics, LLC
Oran Safety Glass
Orbit International Corp.
Oshkosh Defense
Otis Technology, Inc.
OTTO

P

Pacific Scientific Energetic Materials Co.
Panasonic Solutions Company
Paratech, Inc.
Parker Hannifin Corporation
Parvus Corporation
Pelican Products
Perkins Technical Services, Inc.
Phantom Products, Inc.
Pharad, LLC
Philips Healthcare
Physical Optics Corporation
Picerne Military Housing LLC
Pioneer Financial Services
Plasan SASA
Pleora Technologies Inc.
Point Blank Body Armor
Polaris Industries, Inc.
Polartec, LLC
Polartherm
Poongsan Corporation
Port-A-Cool LLC
Powerwave Technologies
PPG Industries, Inc.
Precision Remotes LLC
PRESAGIS
Princeton Tec
PulseTech Products Corp.

Q

QinetiQ North America
QUANTUM3D

R

Rafael Advanced Defense Systems Ltd.
RAM Mounting Systems
Rapiscan Systems, Inc.
Raydon Corporation
Raytheon
Real-Time Laboratories, LLC
ReconRobotics, Inc.
REI Corporate Sales
Remington Defense
Revision
Rheinmetall AG
Rite in the Rain
Rix Industries
Robertson Fuel Systems, LLC
Rockwell Collins
Rocky Brands
Roketsan Missile Industries
Rolls-Royce North America, Inc.
Roxtec
RUAG
RUD Chain, Inc.
Ruggedcom USA, Inc.

S

Saab
SafeNet
SAIC
Saint-Gobain Ceramics
Sawyer Products
SCHOTT North America, Inc.
SCIF Solutions, Inc.
SecureCom/RPS
Seiler Instruments, Inc.
Sekai Electronics, Inc.
Sensata Technologies
Shephard Media
Sibat-Israel Ministry of Defense
SIEMENS
Sierra Nevada Corporation
SIG SAUER
SKEDCO, Inc.
SKYDEX Technologies, Inc.
Smith & Wesson
Snap-on Industrial
SOFRADIR
Sotera Defense Solutions, Inc.
Soule Company
Southwest Research Institute
Sprung Instant Structures, Inc.
SPX Service Solutions
SRC, Inc.
SRI International
SSAB Inc.
Stanley Vidmar
STARA Technologies, Inc.
Strategic Resources, Inc.
Streamlight, Inc.
Streit USA Armoring
Strong Hold Products
SupplyCore, Inc.
Surefire, LLC

T

Tachyon Networks
Tactical & Survival Specialties, Inc.
Tactical Defense Media, Inc.
Tactical Electronics
Tactical Environmental Systems, Inc.
Takata
Taser International, Inc.
TE Connectivity
Team Wendy, LLC
Teijin Aramid USA, Inc.
Teledyne Brown Engineering
Telephonics Corporation
Television Equipment Associates, Inc.
Tencate Advanced Armor
Textron Defense Systems
The Home Depot
The Knapheide Manufacturing Company
The Mistral Group
The Will-Burt Company
Themis Computer
Faria Performance Instruments
Tower Defense & Aerospace, LLC
Transhield, Inc.
Trident University International
Trijicon, Inc.
TriMark Corporation
Triple Canopy, Inc.
Truck-Lite Co., LLC
Turkish Pavilion
Tyco Fire Suppression

U

U.S. Army Exhibit – U.S. Army Office of the Chief of Public Affairs
Ultimate Training Munitions, Inc.
Ultra Electronics
Ultra Machine & Fabrication, Inc.
Ultralife Corporation
Under Armour
United Kingdom Pavilion
United Technologies Corp.
University of Phoenix
UPS
URS
US Ordnance, Inc.
USAA

V

VEC Technology, LLC
Vectronix, Inc.
Vermillion, Inc.
Veterans United Home Loans
ViaSat, Inc.
ViON Corporation
Vision Technologies Systems
VSE Corporation
VT Group
VT Miltope
VT Systems

W

W. L. Gore & Associates, Inc.
W.W. Williams
Wake County Economic Development
Warn Industries
Weatherhaven Resources, Inc.
Webasto Products North America
WFEL Limited
Wilcox Industries Corp.
Wiley X, Inc.
Will-Burt Company, The

Y

YKK (USA), Inc.

Z

Z Microsystems, Inc.
Zel Technologies LLC
Zippertubing Company

See map inside.
Open carefully. Pages are glued.

SCHEDULE-AT-A-GLANCE

GEN Gordon R. Sullivan
United States Army Retired
President, AUSA

HON James A. Baker, III
Former Secretary of State
Marshall Medal Recipient

HON Ashton B. Carter
Deputy Secretary of Defense

HON John M. McHugh
Secretary of the Army

GEN Raymond T. Odierno
Chief of Staff
United States Army

(All events take place in the Walter E. Washington Convention Center unless otherwise noted.)

FRIDAY, 19 OCTOBER

0700 **Resolutions Committee Meeting**
DA Staff Briefing, *AUSA Headquarters*

1000–1900 **Army Ten-Miler Packet Pickup**
D.C. Armory, Washington, D.C.

1000–1900 **Army Ten-Miler Health and Fitness EXPO**
D.C. Armory, Washington, D.C.

SATURDAY, 20 OCTOBER

1000–1900 **Army Ten-Miler Packet Pickup**
D.C. Armory, Washington, D.C.

1000–1900 **Army Ten-Miler Health and Fitness EXPO**
D.C. Armory, Washington, D.C.

1830–2000 **GEICO Pre-Race Pasta Dinner: "All-You-Can-Eat"**
Remarks:
SMA Raymond F. Chandler III
Sergeant Major of the Army
CSM, Army National Guard
CSM Michael D. Schultz
United States Army Reserve
Crystal Gateway Marriott Hotel, Arlington, VA

SUNDAY, 21 OCTOBER

0800 **Twenty-Eighth Annual Army Ten-Miler**
Lead Sponsors – AUSA and KBR
Race starts at the Pentagon

1800–1900 **Chapter Presidents and Delegates Reception***
Renaissance Hotel, Washington, D.C.

1900–2200 **Chapter Presidents Dinner***
Host:
GEN Gordon R. Sullivan
United States Army Retired
President
AUSA
Invited Speaker:
GEN Robert W. Cone
Commanding General
United States Army Training and Doctrine Command
Renaissance Hotel, Washington, D.C.

MONDAY, 22 OCTOBER

0700–0900 **The Sergeant Major of the Army Conference**

0730–0900 **MG Robert G. Moorhead Guard/Reserve Breakfast***
Invited Speaker:
GEN David M. Rodriguez
Commanding General
United States Army Forces Command

0900–1700 **Exhibits Open: Halls A, B, C, D and E**

0930–1115 **Opening Ceremony**
Invited Keynote Speaker:
HON John M. McHugh
Secretary of the Army

1230–1430 **Corporate Member Luncheon***
Invited Speaker:
GEN James D. Thurman
Commander
United Nations Command/Combined Forces Command/United States Forces Korea
Renaissance Hotel, Washington, D.C.

1230–1430 **ROTC Luncheon***
Invited Speaker:
GEN Carter F. Ham
Commander
United States Africa Command
Renaissance Hotel, Washington, D.C.

1230–1430 **Sergeant Major of the Army Awards Luncheon***
(CSMs, GOs, NCOs & Soldiers of the Year)
Invited Speaker:
GEN Lloyd J. Austin III
Vice Chief of Staff
United States Army

1300–1700 **AUSA Book Program**
(Author presentations)

1400–1600 **ILW Contemporary Military Forum I**

1400–1600 **ILW Contemporary Military Forum II**

1400–1600 **ILW Contemporary Military Forum III**

*Ticket or invitation required.

GEN Lloyd J. Austin III
Vice Chief of Staff
United States Army

GEN Carter F. Ham
Commander
United States Africa Command

GEN James D. Thurman
Commander
United Nations Command/
Combined Forces Command/
United States Forces Korea

GEN Robert W. Cone
Commanding General
United States Army Training
and Doctrine Command

GEN David M. Rodriguez
Commanding General
United States Army Forces
Command

1400–1600 **Retiree Seminar**
Presentations:
Army Retirement Services
Federal Veterans Employment Initiative

1400–1700 **AUSA Military Family Forum I**
America's Families: "Our Leaders Speak"
Invited Speakers:
HON John M. McHugh
Secretary of the Army
GEN Raymond T. Odierno
Chief of Staff
United States Army
SMA Raymond F. Chandler III
Sergeant Major of the Army
LTG Michael Ferriter
Assistant Chief of Staff for
Installation Management/Commanding General
Installation Management Command
United States Army
LTG William E. Ingram Jr.
Director
Army National Guard
LTG Jeffrey W. Talley
Chief Army Reserve/Commanding General
United States Army Reserve Command
CSM Earl Rice
CSM Installation Management Command/
Senior Enlisted Advisor
Assistant Chief of Staff Installation Management
CSM, Army National Guard
CSM Michael D. Schultz
United States Army Reserve

1730–1830 **International Military VIP Reception***

1830–2015 **President's Reception***
Honoring:
The Secretary of the Army
The Chief of Staff, United States Army
The Sergeant Major of the Army

TUESDAY, 23 OCTOBER

0800–0900 **International Military VIP and Industry Networking Breakfast***

0800–1100 **Chapter Presidents and Delegates Workshop**

0800–1100 **AUSA Military Family Forum II**
Army Families: "Behavioral Health Challenges and Triumphs"
Invited Speaker:
LTG Patricia D. Horoho
Commanding General
United States Army Medical Command/
The Surgeon General
United States Army
Panelists:
Melissa Seigman – "Her War, Her Voice"
Jill Crider – "MRT: A Family Member's Perspective"
Glenn Schiraldi, Ph.D. – "The Resilient Warrior"

0830–0930 **Congressional Staffers Breakfast***
Invited Speaker:
HON John M. McHugh
Secretary of the Army

0830-1100 **The Sergeant Major of the Army's Professional Development Forum**

0900-1100 **Warrant Officer Professional Development Seminar**
CW5 Gary Nisker
Command Chief Warrant Officer
Army National Guard
Past National President
Warrant Officers Association

0900–1700 **Exhibits Open: Halls A, B, C, D and E**

1000–1130 **Chief, Army Reserve Seminar**
Speaker:
LTG Jeffrey W. Talley
Chief
Army Reserve/Commanding General
United States Army Reserve Command

1000–1200 **ILW Contemporary Military Forum IV**

1000–1200 **ILW Contemporary Military Forum V**

1000–1200 **ILW Contemporary Military Forum VI**

1130–1215 **Dwight David Eisenhower Reception**
Exhibit Halls A, B, C, D and E

SCHEDULE-AT-A-GLANCE

SMA Raymond F. Chandler III
Sergeant Major of the Army

LTG Michael Ferriter
Assistant Chief of Staff for
Installation Management/
Commanding General
Installation Management Command
United States Army

LTG Patricia D. Horoho
Commanding General
United States Army Medical
Command/The Surgeon General
United States Army

LTG William E. Ingram Jr.
Director
Army National Guard

LTG Jeffrey W. Talley
Chief
Army Reserve/
Commanding General
United States Army Reserve
Command

1230 **Dwight David Eisenhower Luncheon***
Speaker:
GEN Raymond T. Odierno
Chief of Staff
United States Army

1400–1700 **AUSA Military Family Forum III**
Army Families: "Transitions and New Beginnings"

Panel I: ***Wounded Warrior Families: Strength through Transitions***
Panelists:
Kim Gadson – Spouse
Melissa Johnson – Spouse
Catherine Mogil, Ph.D. – FOCUS

Panel II: ***Surviving Families: New Beginnings–New Strengths***
Panelists:
Survivor Outreach Services
Bonnie Carroll – TAPS
Lisa Hallett – wear blue: run to remember
Surviving Spouse and Founder

1430–1600 **Army National Guard Seminar**
Speaker:
LTG William E. Ingram Jr.
Director
Army National Guard

1430–1630 **ILW Contemporary Military Forum VII**

1430–1630 **ILW Contemporary Military Forum VIII**

1430–1630 **ILW Contemporary Military Forum IX**

1500–1700 **CSM, OCAR Breakout Session**
CSM Michael Schultz
United States Army Reserve

WEDNESDAY, 24 OCTOBER

0700–0930 **AUSA Region Breakfast Meetings**

0900–1100 **Pre-Retirement/Survivor Benefit Plan Briefing**

0900–1200 **AUSA Military Family Forum IV**
Army Families: "Military Children – Our Nation's Future"

Invited Speaker:
Marilee Fitzgerald
Director of the Department of Defense
Education Activity
Panelists:
Dorinda Williams – ZERO TO THREE
Lynn Chwatsky – Sesame Workshop
Mark Vagle Ph.D. – University of Minnesota

0900–1700 **Exhibits Open: Halls A, B, C, D and E**

0930–1130 **ILW Paper Presentations**

0930–1130 **Department of the Army Civilian Professional Development Seminar**
Renaissance Hotel, Washington, D.C.

0930–1130 **ILW Contemporary Military Forum X**

0930–1130 **ILW Contemporary Military Forum XI**

0930–1130 **ILW Contemporary Military Forum XII**

0930–1300 **Outstanding Soldiers Tour of Arlington National Cemetery and Washington, D.C.**

1130–1330 **Sustaining Member Reception and Luncheon***
Invited Speaker:
HON Ashton B. Carter
Deputy Secretary of Defense

1200–1400 **Department of the Army Civilian Luncheon***
Renaissance Hotel, Washington, D.C.

1330–1500 **ARNG Breakout Session**
CSM, Army National Guard

1400–1600 **Federal Employment Process Workshop**

1400–1600 **ILW Contemporary Military Forum XIII**

1400–1600 **ILW Contemporary Military Forum XIV**

1800–1930 **George Catlett Marshall Memorial Reception***
Exhibit Halls A, B, C, D and E

2000–2200 **George Catlett Marshall Memorial Dinner***
Recipient: HON James A. Baker, III
Former Secretary of State

(All information as of 6 August 2012, and subject to change)

*Ticket or invitation required.

ANNUAL MEETING FAST FACTS

Join More Than 35,000 People!

The Association of the United States Army welcomes all AUSA members, military and civilian employees of the United States armed forces, designated representatives of exhibitor and member companies, invited guests of the Association and others who have an identifiable relationship with the United States Army. Military family members are welcome to attend the Annual Meeting. Some events may not be appropriate for children, i.e., social functions.

All attendees must provide proof of identity by a Government issued photographic ID and must demonstrate that they have an "identifiable relationship" with the United States Army. Following are examples of acceptable demonstrations of such a relationship.

- Membership in AUSA
- Membership in any component of the United States Military
- Civilian employee of the United States Federal Government
- Member of a law enforcement agency
- Employee or guest of an exhibiting company
- Member of a United States military or veterans' association
- Member of a military force of foreign nations which will require a passport
- Invited guests of AUSA

Registration

Registration for the Annual Meeting is free. Visitors with registration badges are admitted at no charge to all program sessions and exhibit areas. For security reasons, badges must be worn at all times. Attendees may register Thursday, 18 Oct., through Saturday, 20 Oct. in the West Registration area and Sunday, 21 Oct. through Wednesday, 24 Oct. in both the East and West Registration areas located in the Walter E. Washington Convention Center. See the schedule below for specific dates and times.

REGISTRATION DESK HOURS

Exhibitors / Attendees

Thursday	18 Oct.	0800–1700	West Registration
Friday	19 Oct.	0800–1700	West Registration
Saturday	20 Oct.	0800–1700	West Registration
Sunday	21 Oct.	0800–1800	East & West Registration
Monday	22 Oct.	0700–1900	East & West Registration
Tuesday	23 Oct.	0700–1800	East & West Registration
Wednesday	24 Oct.	0800–1800	East & West Registration

Ticketed Functions

Only members of AUSA may pre-purchase tickets to social functions. Ticket orders must be received by 28 Sept. Members are encouraged to use the advanced individual registration forms in the June through September issues of ARMY Magazine and AUSA NEWS or online at www.ausa.org. Full payment must accompany all orders and a receipt will be confirmed by e-mail. Tickets can be picked up at the AUSA Ticket Pickup desk beginning at 0800 on Thursday, 18 Oct., through Wednesday, 24 Oct., located in the West Registration area. Refunds for cancellations will be made only upon written requests received by 28 Sept. Nonmembers who register for the meeting may purchase tickets at the Sales Booth beginning at 0800 on Thursday, 18 Oct.

Dress

All events except the President's Reception and the Marshall Reception and Dinner are informal.

Military Dress Code:

- **Guard/Reserve Breakfast:** Duty Uniform (ACU)
- **President's Reception:** Army Service Uniform/Class A
- **Opening Ceremony:** Duty Uniform (ACU)
- **Marshall Reception and Dinner:**
  - Officers: Dress Blues/Mess Dress
  - Soldiers: Dress Blues, Mess Dress, Army Service Uniform/Class A with white shirt and bow tie or civilian black tie.
- **Exhibit Floor and all other events:** Duty Uniform (ACU)
- **Award Recipient:** Army Service Uniform/Class A
- **Speakers:** Business attire, Army Service Uniform/Class A or Duty Uniform (ACU)

Americans with Disabilities Act (ADA)

Registrants with special needs who participate in our Annual Meeting will be accommodated to the fullest extent possible. If you need special arrangements, please advise us at the time you register.

Sponsorship and Advertising Opportunities

Sponsorships: Rand Meade – rmeade@ausa.org
Green Book Advertising: Jim Burke – advdpt@aol.com
Video Wall Advertising: pbedall@metroproductions.com

ASSOCIATION OF THE UNITED STATES ARMY
2425 Wilson Boulevard, Arlington, VA 22201
800-336-4570 • 703-841-4300 • 703-243-2589 fax • www.ausa.org

AUSA Membership Benefits*

Bank of America, N.A.:
AUSA Bank Card
Start receiving great rewards and show your support for AUSA. Call 866-438-6262.

Institute of Land Warfare:
ILW offers writing programs; conducts conferences and symposia; publishes essays, Defense Reports, newsletters; and provides research on defense issues. Call 800-336-4570, ext. 4630 for details.

AUSA Mastercare Group Insurance Plans:
- Active Duty & Retiree TRICARE Supplement
- Accidental Death and Dismemberment Plan
- 10-Year Level Term Life Insurance Plan
- Group Term Life Insurance Plan
- Short-Term Recovery Plan
- Long Term Care Plan

Call 800-882-5707 for more information.

Dental and Vision Discount Plans:
Discounts offered to AUSA members on dental services and vision exams. Call 800-290-0523.

This plan is not available in the states of MT and VT.

Emergency Assistance Plus:
If you or a family member gets injured or sick while on travel, this plan will provide medical assistance, bring a medical specialist or loved one to your side and much more. Call 888-633-6450 for more information.

Government Vacation Rewards:
AUSA now offers its members discounts on cruises, resorts and tour providers. Call 866-871-9181.

GEICO Insurance – Auto, Home, Condo/Renters, and Boat:
In states where available, a special member discount may apply. Call 800-861-8380.

Apple Member Purchase Program:
Apple Computers offers AUSA members a substantial savings on its computers. Call 800-MY-APPLE and mention you are a member of AUSA.

Book Program:
Members receive discounts on selected military books.

Army Times/Federal Times:
Subscription discounts on Army Times/Federal Times. Call 800-368-5718.

Dell Member Purchase Program:
AUSA members can now receive discounts on Dell PCs. Call 800-695-8133 for more information.

AUSA Career Center:
AUSA members can now post their resumes and employers can advertise any new openings they have. Visit our Web site and go to the Resources drop-down, then Career Center.

University of Maryland University College (UMUC):
University of Maryland University College (UMUC) is pleased to offer undergraduate and graduate study programs to AUSA members worldwide. For some program participants, a discounted tuition rate will apply.

Armed Forces Services Corporation:
AFSC guides you through the details on military entitlements for your retirement and survivor planning/assistance for your spouse. Call or e-mail: 888-237-2872, info@AFSC-USA.com.

Choice Hotels International®:
AUSA members can receive discounts on hotel rooms at the following hotels.

- Comfort Inn®
- Comfort Suites®
- Quality®
- Sleep Inn®
- Clarion®
- Cambria Suites®
- MainStay Suites®
- Suburban Extended Stay Hotel®
- Econo Lodge®
- Rodeway Inn®

Call 800-258-2847 and use the code 00800700.

Car Rental Program:
Use the reservation codes on the back of your membership card and save at:

• AVIS	800-331-1441	• Hertz	800-654-6511
• Budget	800-455-2848	• National	800-Car-Rent
• Alamo	800-354-2322 *(rental for under age 25 available)*		

Publications:
- *ARMY* Magazine every month, including the October *ARMY Green Book*.
- *AUSA NEWS* every month.

* **Member discounts and services are subject to change.**

For more detailed information, visit Members Only Benefits and Services at www.ausa.org
or call Member Support at 855-246-6269 / 703-841-4300

A Latvian soldier takes position to cover his squad during an STX event.

"We are only 20 years from the Soviet times. We started from zero—not even weapons," said Lithuanian CPT Dazius Sezenas, the company executive officer with whom CPT Adams was working. "But we grew up and joined NATO, and exercises like Saber Strike are how you grow up. NATO is not just something that exists on paper. It really works."

CPT Daeius Vizinis, the Lithuanian company commander, added, "During Saber Strike, our commanders and soldiers for the first time are working in the field, not just on their own but with coalition forces and partners. Mainly, it's exchanging experiences, and it involves not just officers but soldiers, with all of us learning how to adapt to different situations."

While the 2/104th Cavalry element was working with the Lithuanian company during Saber Strike, a composite Stryker unit from USAREUR's 2nd Cavalry Regiment (CR) was partnered with an Estonian company. The 2nd CR also was in the early stages of preparing for an Afghanistan deployment during the exercise, conducting individual and small-unit training. USAREUR's 160th Forward Surgical Team also was preparing for an ISAF deployment during Saber Strike, conducting its final mission rehearsal exercise at Adazi Base, using part of the base hospital.

Other U.S. participants in Saber Strike included a Marine Corps Reserve weapons company and JTACs from the Air Force Reserve. An Air National Guard contingent flew A-10 attack aircraft and KC-135 tankers to support the exercise. USAREUR's 21st Theater Support Command played an important role in Saber Strike, directly supporting American personnel at the exercise sites while also conducting reception, staging, onward movement and integration training and providing U.S. Army senior leadership to the CPX phase.

Seventh Army's JMTC supplied the exercise's training foundation—deploying training and support teams and gear ranging from advanced simulation equipment for the CPX to sensors and range targeting systems for the STX/FTX.

JMTC is the pivotal piece in USAREUR's training program, providing training assets at the Hohenfels and Grafenwoehr training areas in Germany. (Grafenwoehr is home to the U.S. Army Joint Multinational Readiness Center.) JMTC has the capability to deploy a wide range of training teams and sophisticated training equipment packages throughout USAREUR's area of responsibility. Training teams from the command arrived in Latvia with 19 containers filled with equipment for the exercise.

While conducting or participating in multinational exercises throughout its AOR, USAREUR hosts many other

An American soldier checks for targets, using his rifle's scope.

PFC Matthew Zajac, US Army, 2nd Infantry Division, Fort Carson, Colorado and his father, Mike, photographed at a Fisher House in San Antonio, Texas.

Fisher House Foundation's Hero Miles program provides military members and their loved ones free round-trip airline tickets, sending them to the bedside of their injured service member recovering at a military or VA medical center. Flights are made possible through frequent flyer mile donations by individual airline passengers.

Since its inception in 2004, the generosity of the public has allowed Hero Miles to distribute more than 25,000 airline tickets, saving our heroes and their families more than $40 million. Help reunite America's heroes with their loved ones by donating your miles today. Your contribution will make you a hero to those in need.

For more information, visit **www.fisherhouse.org** and click on *Hero Miles.*

HERO MILES

The Hero Miles program is grateful to our generous partners, including:
AirTran Airways ★ Alaska Airlines ★ American Airlines ★ Continental Airlines
Delta Air Lines ★ Frontier/Midwest Airlines ★ United Airlines ★ US Airways

Hero Miles is a program of the nonprofit Fisher House Foundation.
More information on the Foundation can be found at www.fisherhouse.org.

©2011 Fisher House Foundation / Brendan Mattingly Photography / Don Schaaf & Friends, Inc.

Above, a Stryker from the 2/104th Cavalry moves through the woods in the Latvian training area. Below, SSG Sean Caruso, Company I, 2nd Cavalry Regiment, makes a radio call while on checkpoint duty.

training activities that range from international symposia for senior officers and NCOs to basic leadership training for international soldiers at the Seventh Army NCO Academy.

Many exercises and other training events are conducted under a mix of authority and funding. Saber Strike, for example, was simultaneously a U.S. European Command (EUCOM) exercise (meeting NATO responsibility criteria), a U.S. Joint Chiefs of Staff (JCS) exercise (meeting the criteria of U.S. multiservice training) and a USAREUR exercise (under the criteria of training its units for deployment and meeting its general Title 10 responsibilities to provide trained and ready forces for the nation's defense).

Within the Title 10 construct, USAREUR also must coordinate interoperability of systems such as mission command or communications systems with the partner countries. This interoperability also is promoted during the exercises.

The complex training calendar is planned at USAREUR headquarters in Heidelberg, Germany. (USAREUR Headquarters is slated to move to Wiesbaden, Germany, in the future as facilities are constructed.) Currently, COL Bill Williams oversees the program as the USAREUR G-37 (training plans).

Pennsylvania National Guard CPT Adams discusses various routes with his Lithuanian counterpart.

The top three USAREUR-planned annual regional exercises are Immediate Response, held in Croatia; Saber Guardian, currently held in Romania; and Saber Strike, with the tactical portions traditionally held in Latvia because of the available facilities but with overall responsibility rotating among Latvia, Lithuania and Estonia.

Added to USAREUR's calendar this year is exercise Saber Junction, which will be held at the Joint Multinational Training Center and involves soldiers from 12 countries training alongside the 2nd Cavalry Regiment at Grafenwoehr in a decisive-action/full-spectrum JCS exercise, according to COL Williams.

"In general, the overall program that we're accomplishing here is based on a EUCOM strategy of active security," COL Williams said. "We have two higher headquarters in USAREUR, EUCOM and the Department of the Army, and we have two focuses. One is to get our units ready for war for the Department of the Army or for any other operations worldwide—our Title 10 responsibilities. The other focus is how we do that in this theater to also meet the EUCOM commander's goals."

He said that those goals "not only involve building partner capacity—shifting more toward sustaining partner capacity that we built over the past 10 years with some of our Eastern Bloc countries—they involve interoperability, assurance and access. Assurance is for places where they may have concerns about their safety from neighbors. They sure feel good when the United States shows up with some troops once in a while—demonstrating that we are willing to protect them. It reinforces our position." In addition, he noted, "It's not easy to come into another country, go through customs, follow their laws and regulations, work under established status of forces agree-

Left, Canadian soldiers enter an urban training site building. Above, a Lithuanian soldier stands watch during the exercise.

Top, Estonian soldiers dismount to check for IEDs during the field training exercise portion of Saber Strike. Center, a 2nd Cavalry gunner covers the perimeter during training. Right, American soldiers salute during the Saber Strike 2012 opening ceremony.

ments and handle important details like getting services, water and food, ensuring that they meet the standards that we require for our soldiers."

He explained that to do all that in two countries simultaneously, as with Saber Strike, is even more difficult. Preparing units for a NATO ISAF deployment rotation has been the primary training objective for USAREUR training exercises since the war in Afghanistan began.

"ISAF has been our focus—preparing for NATO operations in Afghanistan—but what you're about to see is a shift," COL Williams added. "We've had more dwell time, and that dwell time has allowed us to use the 2nd Cavalry Regiment and the 173rd Airborne Brigade a little bit more than we have in the past 10 years just because we've had time with them."

He said USAREUR maintains a schedule of "home and away games." Away games are multinational training exercises in other countries; home games are exercises conducted at the Joint Multinational Training Center. "We can invite multinational forces to be a part of the home games," COL Williams noted. "That's one example of how we've blended together the Title 10 responsibility and the strategy of active security."

USAREUR's exercise program is entering a post-ISAF focus stage, he said, moving beyond the maneuver unit levels to develop exercises and engagements that increase interoperability at higher levels of command.

To that end, USAREUR added another level of interoperability training this year, conducting its first Combined Force Land Component Commander (CFLCC) course in July for the most senior level of allied leadership, a war college-level interoperability training opportunity.

Speaking from his headquarters after Saber Strike ended, the USAREUR commanding general said, "This is critically important because we are stepping up to the next level of leader development within USAREUR for our allied partners. Over the last 15 to 20 years we've been doing theater security cooperation at the unit level to help forces develop their countries' militaries. After 10 years of war, where we've had a lot of multinational forces contributing to coalition operations, leaders are realizing that there's an importance in understanding one another's leadership style, leadership techniques and mission command potential."

"In USAREUR," he added, "we have Joint Multinational Readiness Center where units come together to train to-

NATIONAL MUSEUM
UNITED STATES ARMY

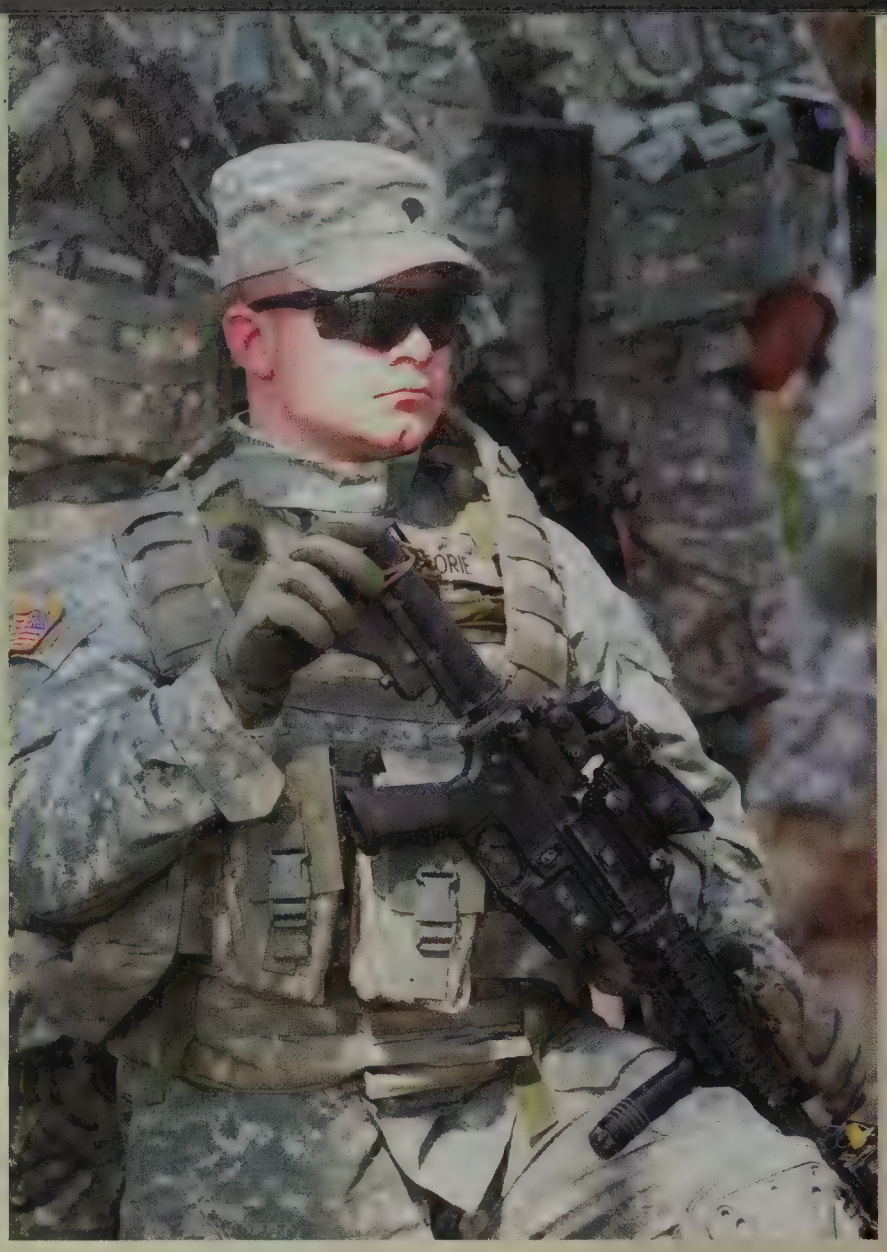
Honoring the Army and Its Soldiers

A great Army deserves a great Museum.

The National Museum of the United States Army, scheduled to open at Fort Belvoir, Virginia in 2015 will be the nation's one and only Museum to present the complete Army's history since 1775. Its immersive exhibits, soldier artifacts, and dynamic venues will tell the stories of selfless service and personal sacrifices of the 30 million American men and women who have worn the Army uniform.

For more information on how to support the National Army Museum, visit us online today!

www.armyhistory.org | **1-800-506-2672**



Left, SPC Chris Storie from the 2nd Cavalry Regiment attends a counter-IED class during the exercise. Right, a Latvian army soldier returns fire during an opposing force attack as his unit goes through a Saber Strike STX lane.

gether, and we've been expanding that. We have the exercise program … where we're doing regional partnerships working together. We have our NCO academy, where we're bringing young soldiers from other countries to train with our specialists to become junior NCOs. Over the last eight years, we've had close to 1,100 NCOs from other countries attend our Warrior Leader Course, where they really get experience with multinational partners at the youngest of levels. Because we work in joint interagency and multinational environments, it's also necessary to train senior leaders to work in those environments before they get to an operation."

Using the Army War College's CFLCC course as the model, USAREUR developed a course adapted to a coalition environment and gained JCS approval, issuing invitations to European allies.

"The officers attending are not only rising officers from their militaries—generals and senior colonels—many are future chiefs of staff of allied armies," LTG Hertling noted.

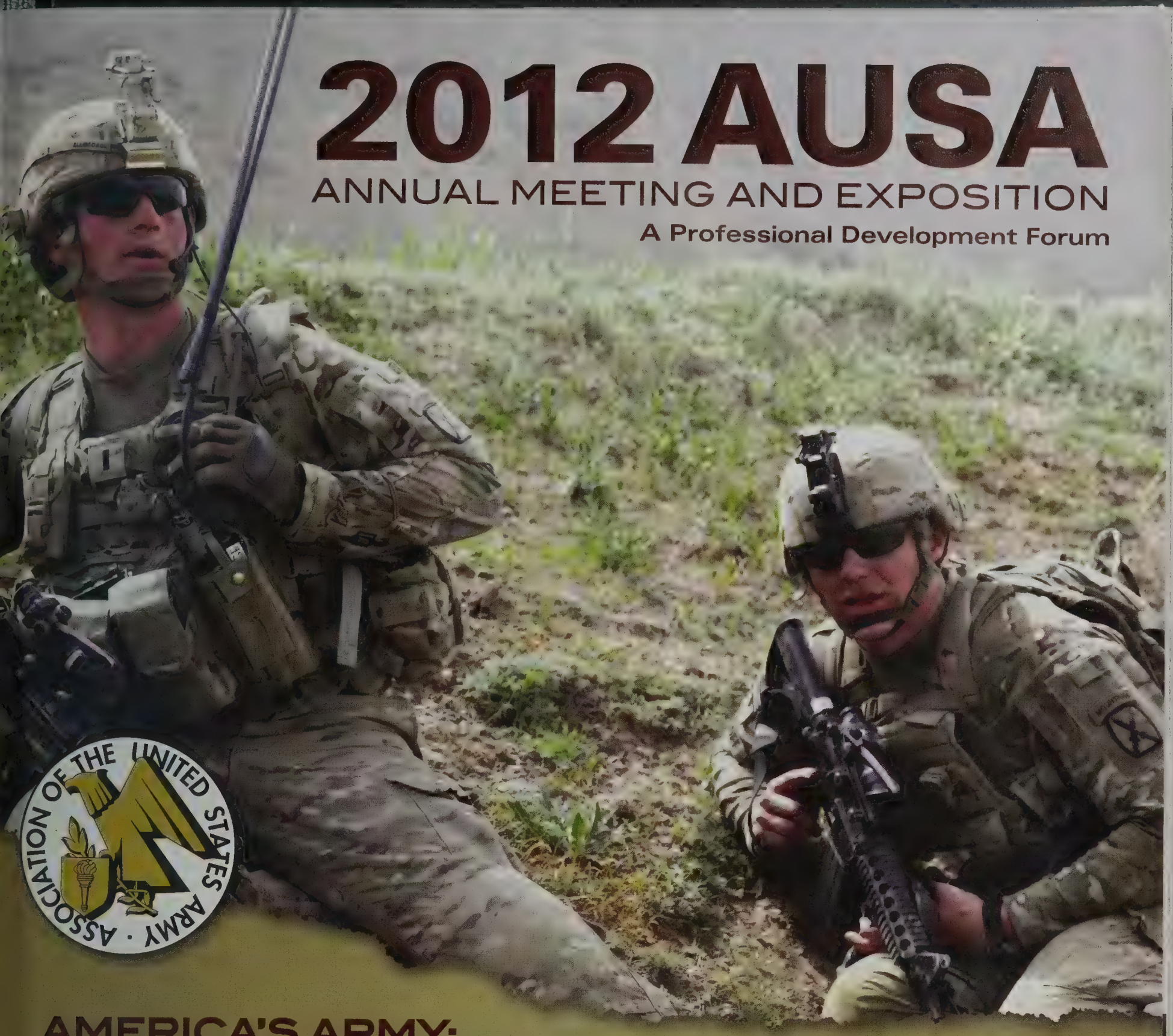
The participants engage in learning how to manage as a CFLCC in a combined/joint/interagency coalition environment through discussions with leaders from the military and government sectors who have experience in that environment.

"USAREUR is leading the way in multinational engagement," LTG Hertling said. "We're always expanding what we do with our allies. We have 26 NATO countries here in Europe and a total of 51 countries—some NATO, some not—in our area of responsibility. So it's important when we talk about how we conduct operations out of theater or even within a NATO Article 5 arrangement to understand what leaders are thinking and how they're doing business. … The importance is understanding each other and continuing to gain trust and how to conduct operations and knowing each other before you potentially hit the battlefield."

While in Latvia during Saber Strike, LTG Hertling said that American soldiers at all levels gain something through multinational training experiences.

"Here's what they get out of this," he said. "We hear the Chief of Staff and Vice Chief of Staff of the Army say that we need to broaden our soldiers. We need to give them broadening experiences. We need to give them more cultural exchanges. Training in Europe, U.S. soldiers for the first time could be talking to Estonians, Latvians, Lithuanians, Poles or Georgians, and they understand cultures and they understand how to work alliances when they come together in combat. … When you're here, working with coalition partners, you have to work through languages. You have to work through cultures. You have to work through the way *they* do it. You can't simulate that back in the United States. So I would suggest—and I know I'm biased—that soldiers who train over here get a much better training experience. They are much more broadened in terms of leadership. They have to actually deploy to places within their training; they actually have to bring equipment across multinational lines and get through customs and get into a country. Those are the kinds of thing we do in U.S. Army Europe." ★

2012 AUSA
ANNUAL MEETING AND EXPOSITION
A Professional Development Forum



AMERICA'S ARMY:
SERVICE TO THE NATION, STRENGTH FOR THE FUTURE

Why You Should Attend

- Join over 35,000 people from the world-wide defense community
- Network with key leaders from the Army, DoD, Congress and the defense industry
- View over 700 exhibits featuring the latest technology, products and services
- Participate in panel discussions on the state of the Army and the future of national defense

Don't miss this chance to build relationships and advance your knowledge!

Register Today!

22-24 OCTOBER 2012

Walter E. Washington Convention Center, Washington, D.C.

www.ausa.org | abrody@ausa.org | 703-907-2665

Investing in the Warfighter of 2020

By Daniel Goure

As the drawdown in Afghanistan accelerates and the footholds of democracy go deeper in Iraq, the U.S. Army must reset and re-equip while facing a dramatic reduction in resources. Yet a backdrop of persistent conflict covers the world from Syria to Somalia. Clearly, our soldiers and squads will be called on again; they must be equipped to be decisive whether engaged in combat or community building.

The United States does not intend to withdraw from the world or shirk its responsibilities. The U.S. Army may get smaller, but it must remain world-class. The new defense strategy defined the future challenge: "This country is at a strategic turning point after a decade of war and, therefore, we are shaping a Joint Force for the future that will be smaller and leaner, but will be agile, flexible, ready, and technologically advanced. It will have cutting edge capabilities, exploiting our technological, joint, and networked advantage."

Many lessons were learned this past decade on how to bring forward new technology from the defense and non-defense industrial base to rapidly equip the force. These lessons must not be lost. History shows that dramatic post-conflict drawdowns leave us unprepared for future missions. This time, Pentagon planners must keep the soldier at the top of the priority list when making program choices. Soldiers will continue to be our most effective weapons system.

As the Army comes together in October for the AUSA Annual Meeting and Exposition, uniformed leaders should take time to focus on the equipment and technologies that could improve soldier and squad capabilities. The coming drawdown demands a deep dialogue with industry to create an investment plan for continued progress in areas such as lightweight materials for protection; solutions to replace and improve batteries with lighter, renewable and mobile power sources; feeding systems that increase soldier nutrition with more nutrient-dense foods delivered to forward operators in mission-compatible, lighter-weight packaging; creating system-of-systems approaches to integrating the soldiers' "kit"; improved methods of acquisition that move beyond a commodity mind-set; and smart ways to rationalize and focus the disparate research and development (R&D) programs across the services and science and technology agencies to maximize innovation per dollar invested.

The Lessons of 10 Years of Combat

Ten years of continuous conflict have produced dramatic changes in the way the military organizes, trains and equips. For example, the Army reorganized itself into a modular force with brigade combat teams arranged in task forces tailored to specific missions and created eight centers of excellence to provide training in areas such as ma-

DoD

neuver, fires, signals and aviation. To meet operational requirements, new platforms and equipment were designed and produced including 25,000 mine resistant ambush protected vehicles, hundreds of tactical robots, and airborne intelligence, surveillance and reconnaissance.

Fielding these capabilities was made possible by collaboration between DoD and industry. The existing acquisition system was too slow, so a new set of organizations and processes was created specifically to equip the joint force. Today, the rapid equipping force and rapid fielding initiatives provide mechanisms for responding to specific urgent operational needs and outfitting units heading for combat.

Another significant collaborative achievement was in the area of soldier clothing and equipment. The harsh physical environment, nature of the adversary and intensity of combat quickly illuminated inadequacies in standard issue gear. Urgent needs emerged for fire-resistant clothing, improved body armor, new First Strike Rations, rechargeable batteries and improved night illumination. The commercial soldier equipment industry—a diverse collection of large and small businesses—responded to the requirements for large volumes of specialized gear. Innovative contracting approaches were instituted to improve delivery, such as employing prime vendors to manage supply chains producing complex clothing and equipment ensembles.

Soldiers, sailors, airmen and marines are the U.S. military's most important and frequently deployed asset. Providing them with the best equipment should remain a well-funded priority. Investment in the items carried by the soldier and squad will enable the future force to operate in any environment with greater agility, power and flexibility than the adversary. Several areas to focus on include protection, power, nutrition and future strategy.

Protection and Prevention

The wars in Iraq and Afghanistan increased threats in an environment that demanded more protection and more mobility. Innovation for soldier protection has been largely incremental—nips and tucks to the body armor, slight reductions in material usage, and additions of features such as quick release sum up much of the progress. Beyond these improvements, there has been insufficient progress reducing body armor weight. Today, operational commanders find themselves decreasing weight by decreasing protection levels. As the force resets and re-equips, it is time to critically examine all aspects of armor research, development and procurement.

The warfighter of 2020 will require an increase in protection without an increase in weight for a full spectrum of threats, from conventional fragmentation and small arms to light fragmentation and blast impact as well as thermal, flame and chemical/biological hazards. Future protective equipment must be tailored to mission needs and threat profiles. It must be modular and scalable and work together with the other equipment as a system that the combatant carries.

DoD

More effective than protective equipment for survivability is being able to prevent and evade exposure to threats. The warfighter of the future must be able to identify threats in time to avoid them unless mitigated through other means. Increasing access to and unifying networks as well as advancing optics and sensors will keep the future force from unnecessary contact.

Power and Energy

Beyond better body armor, reducing power and energy resupply needs will also protect soldiers by lightening their load and limiting their exposure. Creating more renewable sources of power at squad and soldier levels will decrease the need for fuel convoys; this will remain a priority for the future force. Like lighter armor, making lighter batteries pushes the boundaries of physics and chemistry. Substantial cross-discipline basic research is required for the promise of step-change nano and other materials to be realized. Progress is being made, however: The new Soldier Worn Integrated Power Equipment System and the Expeditionary Soldier Power Suite are two examples.

Food and Nutrition

While fuel efficiency and new longer-lasting, lighter power sources are critical for the squad and individual equipment, what actually fuels the soldier is food. One need only check the menu for today's Meals Ready to Eat (MREs) to see how far we've come since the days when MRE meant "meals rejected by everyone." The Combat Feeding Directorate at the U.S. Army Research, Development and Engineering Command continues to collaborate with the food industry on new and better rations. To meet the needs of the future force, the theme of more with less applies here as well. In this case, what is required is more nutrient-dense food more efficiently delivered with less and lighter packaging that can withstand harsh environments. Every ounce taken from every item a soldier carries is the only way to materially lighten the load.

Shaping a Strategy for the Future

Joint Vision 2020: America's Military: Preparing for Tomorrow states, "If our Armed Forces are to be faster, more lethal, and more precise in 2020 than they are today, we must continue to invest in and develop new military capabilities."

Protection, power and food are three of the many soldier equipment categories meriting investment focus. Maintaining progress in individual equipment during declining defense budgets will require a renewed commitment and increased efficiencies. As the defense budget shrinks, there is a tendency to focus on major systems with powerful industry and political constituencies. The individual equipment industrial base—consisting largely of small business—may be ignored and left to decline as it was after Operation Desert Storm. Doing so, however, would lead to an irreversible loss of manufacturing and R&D capabilities.

To meet the needs of soldiers and squads in 2020, a systems approach should be employed. Protection, power, food, network communications and lethality among other concerns must be approached holistically and jointly among the services, especially at the basic and applied research levels. New materials are necessary to achieve real breakthroughs, and this requires substantial investments only possible by sharing resources and risks across the services and between public and private entities. New and reformed acquisition practices are still required to facilitate industry reinvestment and competition.

With commands like Program Executive Office Soldier leading the way, tremendous progress has been made in increasing soldiers' capabilities with improvements to their equipment. Much has been learned in acquisition agencies and on industry production lines. U.S. workers are proud to produce for U.S. warfighters. Continued collaboration and investment will secure these gains for the future force. ★

Daniel Goure, Ph.D., is a vice president of the Lexington Institute. He is a former Pentagon official and holds a master's degree and a doctorate from Johns Hopkins University.

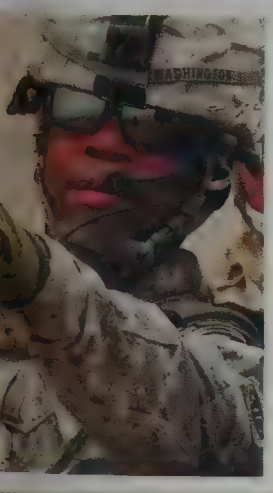
Early Bird Exhibit Space Rates Now Available

The Association of the United States Army's Institute of Land Warfare

AUSA WINTER SYMPOSIUM AND EXPOSITION

A Professional Development Forum

20-22 FEBRUARY 2013 | Fort Lauderdale, Florida



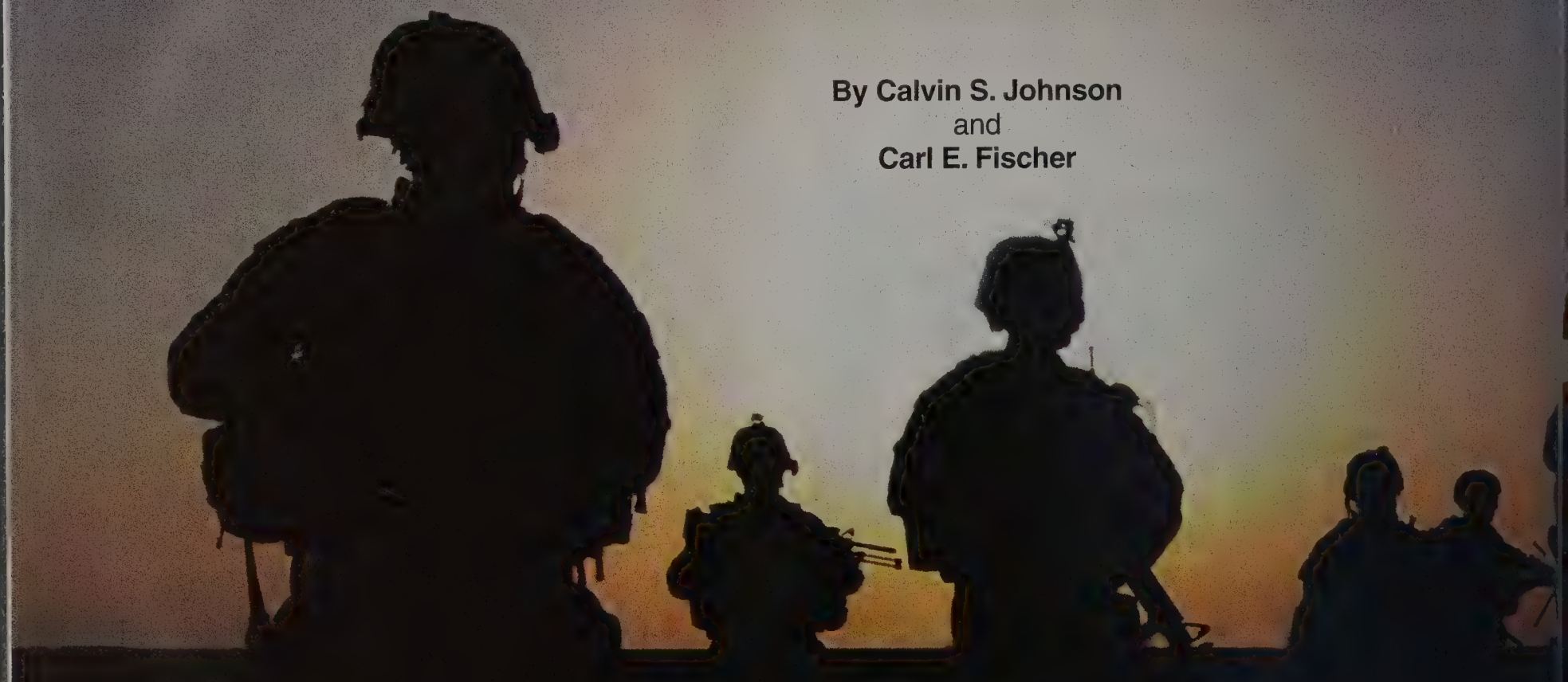
The place for the latest insights and up-to-the-minute intelligence as the U.S. Army plans for modernization and repositioning in 2020.

- Insights and needs for transformation to 2020
- Networking with business partners and other U.S. Army providers
- PM and PEO insights on today and perspectives on tomorrow

Visit www.ausa.org for more information.

AUSA, Industry Affairs: 800-336-4570, ext. 2665

Mission Command Battle
Examines Transforming



By Calvin S. Johnson
and
Carl E. Fischer

Wanted: A modernized, expeditionary land force that can prevent conflict through influence, deterrence and credibility; shape the operational environment through enduring relationships with other armies; and win the nation's wars with trained, equipped and ready forces.

The Chief of Staff of the Army (CSA) has directed the U.S. Army Training and Doctrine Command (TRADOC) to lead efforts to redesign the Army of 2020 as part of a larger effort to support changes in defense strategy. TRADOC will deliver the capabilities required to support the joint force and posture the Army to succeed in an era of constrained resources.

The Army Capabilities Integration Center (ARCIC) leads TRADOC's transformation efforts by developing concepts, technologies and formations that generate a lighter, more

Lab the Force

U.S. Army/Richard Rzepka

lethal, strategically responsive Army. Organizations throughout TRADOC are focusing on creating a land force capable of preventing conflict, shaping the environment and winning our nation's wars.

As the responsible agent for the requirements development associated with the modular and future corps, division, and mission command, the Combined Arms Center (CAC) has charged the Mission Command Battle Lab (MCBL) to lead and support the ARCIC experimentation plan. The MCBL informs decisions and mitigates risk to current and future Army forces by examining and evaluating emerging concepts and technologies through experimentation, studies and prototyping, while informing the combat development and acquisition processes.

The MCBL, with the Army experimentation community of practice, uses the subject-matter expertise of diverse partners and conducts objective analysis in multiple forums to examine Army 2020 concepts and evaluate mission command-related technology prototypes. Through this rigorous analysis, tailored partnering and developing new technology, joint and Army experimentation refines concepts and provides critical analysis for development of doctrine, organization, training, materiel, leadership and education, personnel, and facilities (DOTMLPF) solutions for the force.

Essential Expertise

As it examines Army 2020 concepts and technologies, MCBL benefits from additional expertise originating outside TRADOC. These broad and diverse perspectives, fully framing the problems and providing and capturing holistic solutions, include:

- U.S. Department of State
- U.S. Transportation Command
- The Army Airborne Community
- The Peacekeeping and Stability Operations Institute
- The Joint Center for International Security Force Assistance
- U.S. Army Cyber Command
- Third U.S. Army
- U.S. Army Africa
- CAC's Combined Arms Doctrine Directorate
- U.S. Army TRADOC Analysis Center
- TRADOC Centers of Excellence
- U.S. Army Space and Missile Defense Command
- U.S. Navy
- U.S. Air Force
- U.S. Marine Corps
- The Army Special Operations Capabilities Integration Center.

This year, MCBL-led experimentation is focusing on Army 2020 initiatives set in a gain-and-maintain operational access (GAMOA) scenario as the Army seeks to design the land force envisioned by the CSA. Concepts and organizations being investigated include collapsing an echelon of command above division; developing the ability to rapidly establish and employ an Army-based joint task force for contingencies; regionally aligning corps, divisions and brigades; establishing engagement and advisory organizations and capabilities; proposing a reconnaissance and surveillance brigade; creating interdependence of special operations and conventional forces, and of Army and joint forces; and crafting new protection and medical organizations.

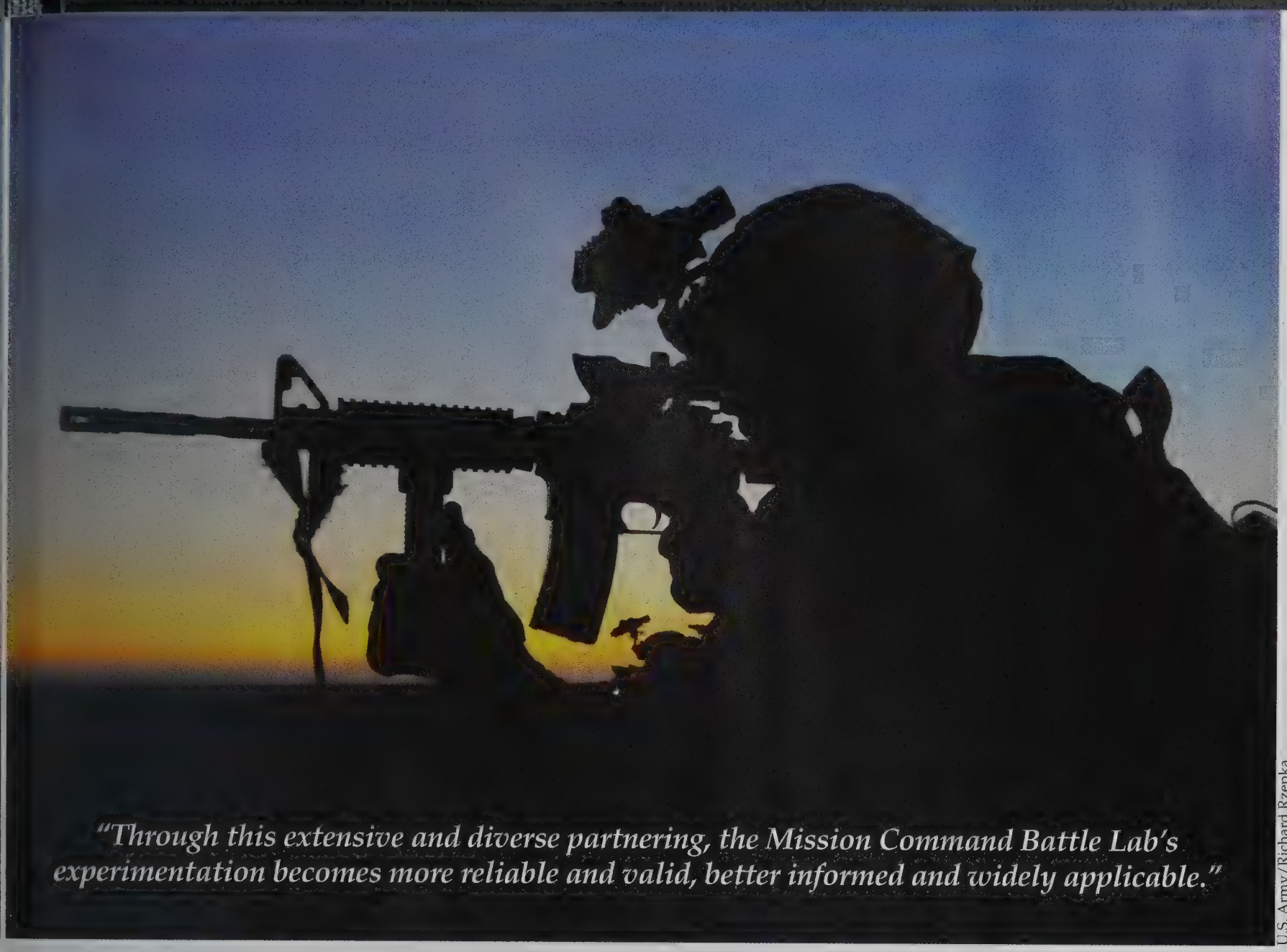
As TRADOC's integrative and mission command warfighting function battle lab, MCBL incorporates into experimentation concepts associated with the operations process, cyber and electromagnetic activities, inform-and-influence activities, and knowledge management. While research on many of these issues continues, experiments are providing objective, empirical data to decision makers to supplement input from their own experiences and other venues—for example, general officer operational assessment workshops and brigade commanders' conferences.

The MCBL recently hosted a GAMOA simulations-driven experiment and war game to examine these issues. The scenario required participants to gain and maintain access in an anti-access and area-denial environment, conduct joint forcible entry operations, and assess the land force's ability to develop combat power rapidly and attain operational objectives.

MCBL began this examination of gaining and maintaining access as a contributor to the development of the Joint Operational Access Concept and has continued by informing the recent Army-Marine Corps concept, Gaining and Maintaining Access. By collaborating continuously with the Joint Staff J-7, MCBL expects to influence the future Joint Concept for Entry Operations as well. In addition to these conceptual investigations, the MCBL examines mature technologies targeted at improving the art and science of mission command. These examinations inform decisions that drive other decisions, particularly those regarding structure, headquarters design and mission command technologies. Focused events within the experimentation program provide research and insights that identify feasible, transformative DOTMLPF solutions. Recent MCBL experiments provide ample evidence of the Army's return on its investment.

In 2010, the MCBL hosted Talon Strike/ Omni Fusion (TS/OF) 10, an interoperability demonstration conducted with British forces preparing for deployment to Afghanistan. Army experimentation routinely includes multinational perspectives and participants to identify Army interoperability requirements and learn from unified partners. Among the results of TS/OF were the validation of several multinational mission readiness training exercise objectives and improvements to the universal chat bridge enabling integration of chat streams in multiple formats. In addition, last year's Allied Auroras, which included the participation of Australia, New Zealand, the United Kingdom, Canada, and the U.S. Army and U.S. Marine Corps, improved simulation interoperability among all participants. These events demonstrated and then validated a multinational, virtual training capability that improved readiness and reduced risk before deployment to a combat theater, while saving significant resources compared to geographically colocated training.

Calvin S. Johnson is the deputy director for the Mission Command Battle Lab (MCBL) and a graduate of the U.S. Army War College. He is a retired colonel with experience in domestic, joint, interagency, inter-governmental, multinational and overseas operations.
***Carl E. Fischer, Ph.D.**, is a support contractor for MCBL, a graduate of the School of Advanced Military Studies, a former instructor of operations and strategy at the Command and General Staff College, and a retired Army lieutenant colonel with two combat tours and planning assignments in Korea and Afghanistan.*



"Through this extensive and diverse partnering, the Mission Command Battle Lab's experimentation becomes more reliable and valid, better informed and widely applicable."

U.S. Army/Richard Rzepka

Informed choices that improve technologies, mitigate risk and save resources are all results of Army experiments that incorporate noted experts from the Army Research, Development and Engineering Command, Defense Advanced Research Projects Agency, Joint Staff J-7, academia, the National Laboratories, industry, the Army acquisition community, the U.S. Army War College, the Command and General Staff College, and other organizations and allies around the world. Through this extensive and diverse partnering, the MCBL's experimentation becomes more reliable and valid, better informed and widely applicable.

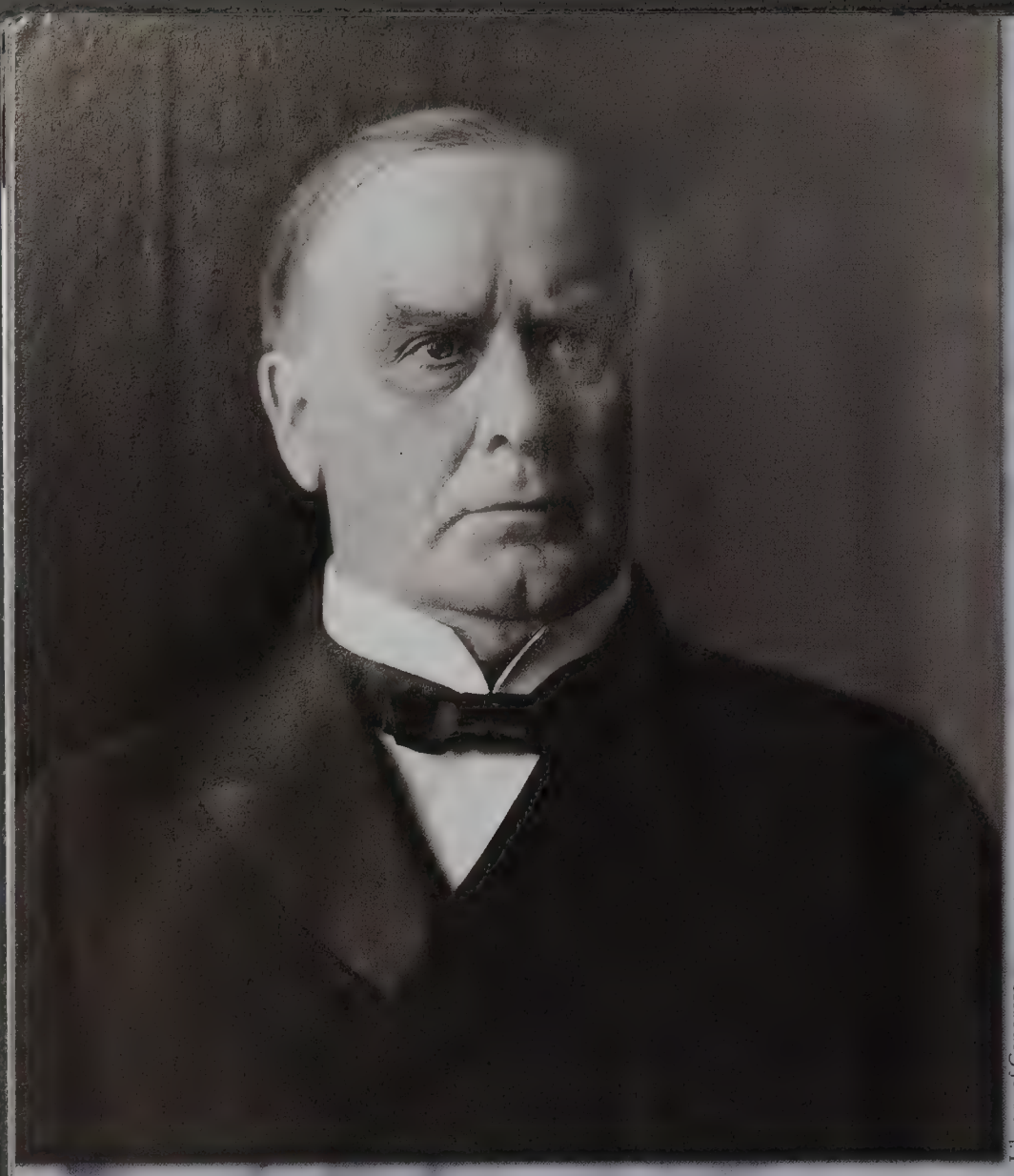
Partnering is critical to MCBL's science and technology mission, in which the lab examines emerging mission command-related technologies. Other recent efforts have informed materiel development in the science and technology and Assistant Secretary of the Army (Acquisition, Logistics and Technology) programs.

In the past three years, science and technology experimentation has examined automated running estimate software, multitouch technologies and an automated cognitive assistant (the Personalized Assistant that Learns, PAL). Most recently, the lab conducted a demonstration of automated decision-making technologies to gather feedback on its value to leaders and applicability across warfighting functions. Insights gleaned from these assessments shorten acquisition timelines and get capabilities to soldiers faster. In addition, experiments cull less promising technologies from further consideration, focusing scarce resources on those with the most value to the Army.

As a drawdown looms, the Army faces tough choices in a fiscally constrained environment. The importance of Army experimentation has never been greater. Experimentation in the MCBL has mitigated risks with rigorous, objective examination of concepts, organizations and technologies, and it has provided Army leaders with data to make informed decisions important to the future successes of our Army. Experimentation has integrated operational units and a diverse community of practice and provided valid results with broad application. It has paired issues effectively with subject-matter experts from the generating and operating forces, academia, industry, and interagency and multinational partners. Recent experimentation has used the historically high combat experience currently in the force and applied it to future concepts and organizations.

MCBL's experimentation has provided a measurable return on investment across the DOTMLPF in enlightened and improved technology choices; greater interoperability; better-informed decisions; effective doctrine, tactics, techniques and procedures; and, ultimately, improved operations in complex operational environments. Experimentation is a cost-effective and valuable tool in the continued transformation of our armed forces.

As TRADOC wrestles with how to create the land force that the CSA has challenged the Army to develop in the coming years, MCBL—in close coordination with its extended community of practice—will continue to provide objective, measurable insights and findings to assist Army leaders to make better-informed decisions on the way ahead. ★



Library of Congress

William
The Veteran's

By John O. Marsh Jr.

No American President had a greater awareness of the importance of military veterans in our national life than William McKinley or did more to recognize them. Today, however, that remains a neglected chapter in the history of his public service.

McKinley's credentials as a combat veteran are truly exceptional. He served the entire four years of the Civil War and took part in many combat operations both as an enlisted soldier and a commissioned officer.

McKinley's military service was a defining moment in his life and later shaped his public service. When the Civil War broke out in the spring of 1861, McKinley joined the 23rd Ohio Regiment as a private and served in the enlisted ranks for 14 months. Because of his action at the battle of Antietam, he was given a commission as a second lieutenant. Before the war ended in the spring of 1865, President Lincoln had issued him a brevet as a major, citing his outstanding combat duty.

Library of Congress

National Park Service/Canton (OH) Repository

McKinley: President

National Park Service

Clockwise from opposite page: President William McKinley circa 1900. His valor at the Battle of Antietam, Md., in 1862 resulted in promotion to second lieutenant. McKinley began his military career as a private in the 23rd Ohio Regiment when the Civil War began in 1861. A plaque on the side of a memorial shows him in profile as soldier and President. Volunteer regiments from North and South signed on to fight the Spanish-American War in 1898; McKinley channeled that support to reduce sectional antagonism.

Library of Congress

Confederate graves surround a monument to Southern soldiers at Arlington National Cemetery, Va. President McKinley was instrumental in the congressional recognition of their service and sacrifice.

The Warrior's Bond

President McKinley saw that the way to bring the nation together and to reduce sectional antagonism was through the veterans of both armies—North and South. He established a "warrior's bond" with those veterans and had the wartime credentials to do it.

The Spanish-American War occurred during McKinley's presidency. He was impressed by the support and enthusiasm for the war by people in the South, and he brought a representative group of Confederate officers on active duty for leadership positions in the American Army. This gesture was not lost on Southern veterans.

In addition, in 1898, President McKinley addressed the legislature of Georgia. He recognized the outstanding service and sacrifices of the Confederate soldiers in the Civil War and extended a hand of friendship, urging the federal government to assume responsibility for the care of thousands of Confederate soldiers' graves in the North. Acting on his request, Congress granted approval; consequently, there are Confederate graves in the Arlington National Cemetery, placed in concentric circles around an impressive monument to their sacrifice and valor. The monument was the creation of Moses Ezekiel, a Confederate veteran now buried under it.

McKinley was also instrumental in the initiative to return battle flags that had been either surrendered or captured in the war to the Southern states. Earlier efforts by President Grover Cleveland to accomplish this had been unsuccessful and enraged the veterans of the Grand Army of the Republic, an association of Union veterans.

Tragically, shortly after President McKinley began his second term, he was assassinated at a public event in Buffalo, N.Y.

He left not just a soldier's legacy but also a legacy of distinguished public service, which included many years in the U.S. Congress, where he served as Chairman of the Ways and Means Committee. Later he was elected as governor of Ohio and then twice elected President.

* * *

There were a number of significant developments that took place during the McKinley administration. These include:

- The United States became a new world power on the international stage after the Spanish-American War.
- The prosecution of the war and postwar impacts contributed significantly to the reduction of sectional antagonism. The veterans of the Civil War—both North and South—helped establish better relationships between the two sides.
- McKinley knew the horrors of war and was reluctant to take the United States into a conflict with Spain. He sought, unsuccessfully, a peaceful resolution of the differences between the two countries. (In fact, it was Spain that first declared war on the United States.)
- The American Army in the Spanish-American War was an all-volunteer force.
- African-Americans played a significant role in the war, a fact that has not been appropriately recognized. Thirty-three African-American sailors were lost in the explosion on the U.S.S. *Maine*, and the Army's "Buffalo Soldiers" distinguished themselves in the ground role.
- President McKinley was a strong advocate of African-American suffrage. This is also a dimension of McKinley's public service that has been overlooked.

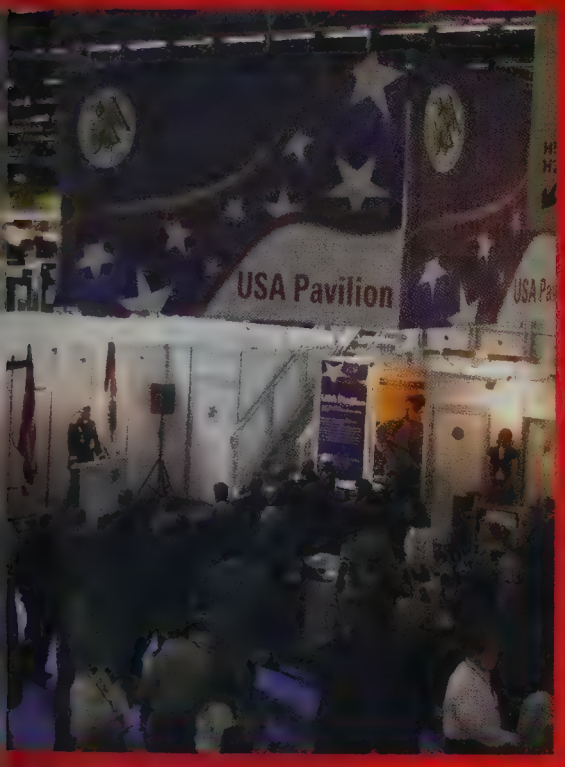
An overview of McKinley's presidency brings one to the conclusion that foreign policy and a genuine concern for veterans were hallmarks of his administration. His impacts on affairs both at home and abroad warrant a much closer look at the "Veteran's President." ★

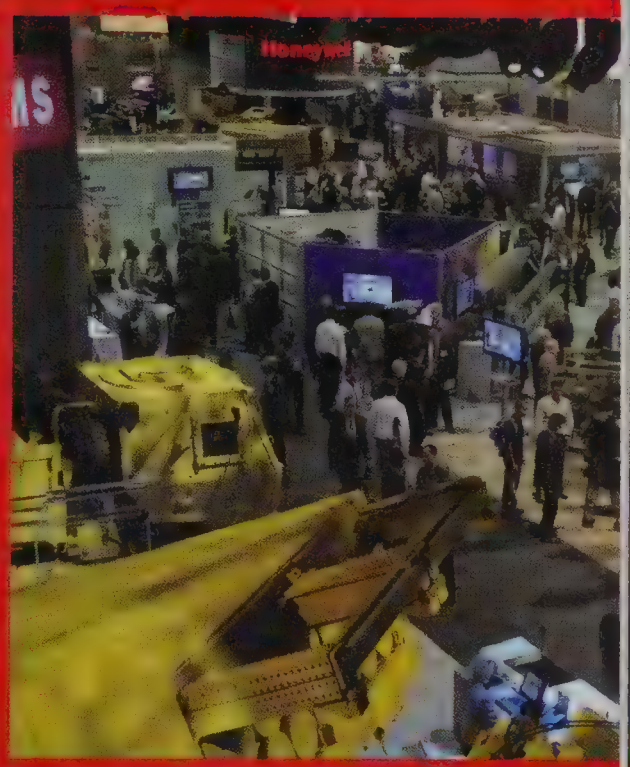
John O. Marsh Jr. *is a former Secretary of the Army and former Virginia Representative in Congress. Currently, he serves as a distinguished professor of law at George Mason University.*

Association of the United States Army's

USA Pavilion

at IDEF 2013





Early Bird rate - $810/m²,
effective until 1 October.
Standard rate - $910/m²

7-10 May 2013

Istanbul, Turkey

For exhibit space sales, contact
Amy Frankenstein at 703/841-4300 x2413
or intlprogram@ausa.org.

www.ausa.org

"For want of a nail

A New Generation of Tools For America's Warfighters

By Scott R. Gourley

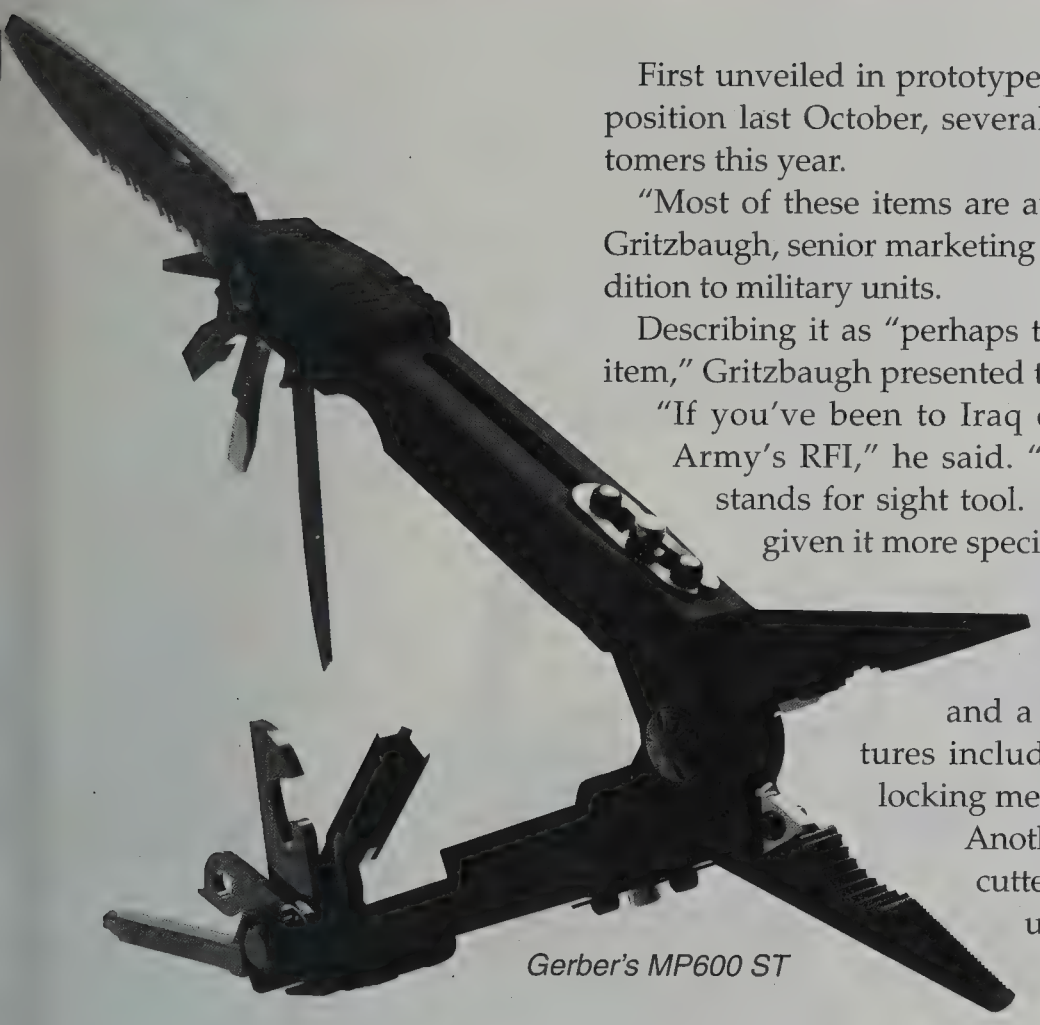
Sometimes the little things can have a large tactical impact. At least that's the hope and expectation shared by several knife and tool developers who have begun to offer another new generation of tactical devices through military programs like the Rapid Fielding Initiative (RFI) or direct sales at Army and Air Force Exchange Service (AAFES) and other retail outlets.

Representative glimpses into the 2012 emerging tactical tool market were offered by Gerber, Leatherman Tool Group and Ontario Knife Company earlier this year.

Gerber's Downrange Sharpener

Gerber's De Facto Knife

the shoe was lost . . ."



Gerber's MP600 ST

Gerber

First unveiled in prototype form during the AUSA Annual Meeting and Exposition last October, several new Gerber tools are available to military customers this year.

"Most of these items are available to the military now," explained Andrew Gritzbaugh, senior marketing specialist for Gerber, "at places like AAFES" in addition to military units.

Describing it as "perhaps the least interesting but probably most important item," Gritzbaugh presented the MP600 ST one-hand-opening tool.

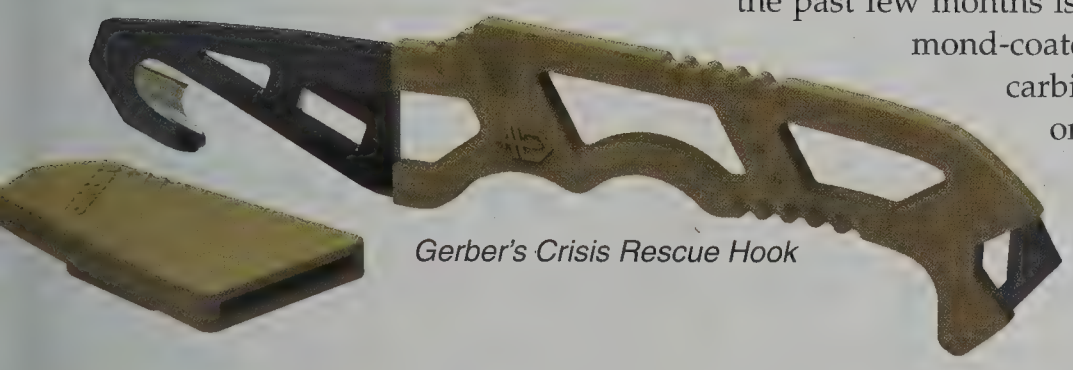
"If you've been to Iraq or Afghanistan you've been issued this on the Army's RFI," he said. "The MP600 ST is the new version for 2012. *ST* stands for sight tool. ... We've combined some of the components and given it more specific use to weapons maintenance in the field."

The sheepsfoot blade now has a partially serrated/partially fine edge; it also comes with a carbon-scraping pick, a front sight post adjuster and a long Phillips head screwdriver. Additional features include a rotatable carbide wire cutter and modified locking mechanisms that simplify use with gloves.

Another new Gerber product for 2012 is a modified strap cutter dubbed the Crisis Rescue Hook. "It's like our regular strap cutter that you see on guys everywhere," Gritzbaugh said, "but it's much bigger, so you can get more torque behind your pull. We also recognized that medics were using this very frequently to cut clothes to access wounds, so we added an O2 [oxygen tank] wrench. If you're in the back of a combat vehicle and you need to expose a casualty's wounds, you can also adjust oxygen without having to set your tool down. It makes you a more efficient soldier. It also has a window punch on the end of the handle."

Another multiuse tool that has made the transition from prototype stage over the past few months is the Downrange Sharpener, featuring two diamond-coated rods for large and small serrations, rotatable carbide cutters for fine edges or tip, and a flat panel on the back for finishing a tip or edge.

The De Facto close quarters combat knife is also new for 2012. The four-inch spear-point blade features dual serrations and is coated in the color Tan 499.



Gerber's Crisis Rescue Hook

Gerber's Combat Fixed Blade Knife

Early Bird Exhibit Space Rates Now Available

The Association of the United States Army's Institute of Land Warfare

ARMY AVIATION SYMPOSIUM AND EXPOSITION

A PROFESSIONAL DEVELOPMENT FORUM

9-11 JANUARY 2013

NATIONAL HARBOR, MARYLAND

Will You Recognize U.S. Army Aviation in 2020?

Engage with the broadest expertise as the Army modernizes and transforms.

- PM and PEO perspectives on experience, needs and direction
- Learn about critical performance under dynamic field conditions
- Discuss equipment and technology as part of modernization

Visit www.ausa.org for more information.

AUSA, Industry Affairs: 800-336-4570, ext. 2665

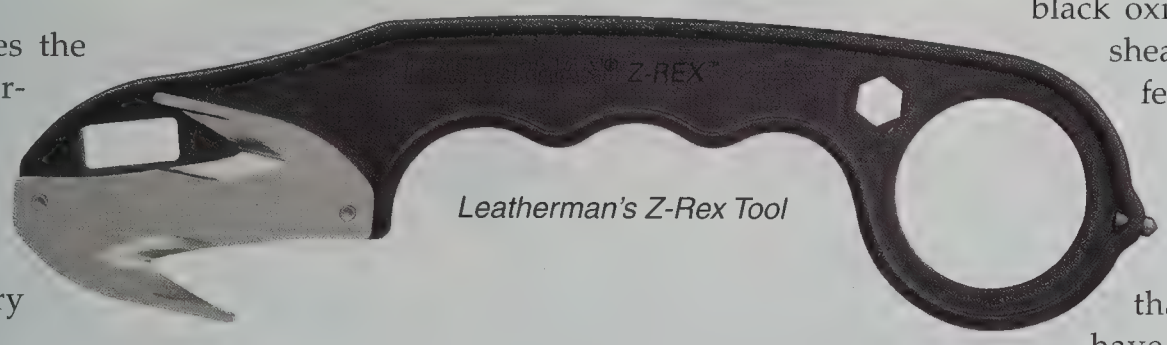
"It's your everyday dagger but with additional features you might want," Gritzbaugh said. "This was developed with veteran Special Forces operators. It has a spike pommel on the back and a very interesting rubberized grip. Another really nice thing is the friction-lock sheath: It mounts on a MOLLE [modular lightweight load-carrying equipment] belt, wherever you want to put it. Lots of people mount it on their left shoulder. If your primary weapon system goes down, you have this in a friction lock and can easily access this weapon."

An additional locking mechanism can be used to temporarily lock the weapon during airborne operations or other rugged assault phases.

Leatherman's One Hand Tool

Gerber's new Combat Fixed Blade knife was created on the company's popular Yari knife platform. According to Gritzbaugh, the new knife is "full-tang construction; 154CM high carbon stainless steel, so it's very durable. It's designed for prying, cutting, ripping through things. It's not necessarily a fighting knife, although you can use it for that. But this is really about utility. This is your answer if there is anything you need to do that involves a sharp edge."

The knife features the same type of rubberized grip as the De Facto, an extremely low-profile sheath and works equally well with wet or dry hands.



Leatherman's Z-Rex Tool

Leatherman

"We have two tools coming out that we are viewing to extend our support to the military that really began with the MUT [military utility tool]," offered Juli Warner, marketing communications manager at Leatherman Tool Group. (See "Soldier Ingenuity Meets 'Batman Cool,'" ARMY, July 2010.)

"The military had been using our products for years," she said, "but we never designed anything specifically for them until the MUT came about." Since then, she said, Leatherman has "been perfecting" the One Hand Tool (OHT).

"Something that's on the market right now and carried by many soldiers is the Gerber 600, the one-hand-deployment pliers," she acknowledged. "That's been something that's been part of the RFI for years. When the patent expired on that, we decided to take it to the next level. We have a one-handed tool ... that Leatherman perfected and has patents on with opening the blade from the outside, like the Wave, which is still our most popular tool. So we asked ourselves, 'Why don't we combine all that stuff together into a one-handed tool—100 percent operable with one hand?'

"We are going to come out with that one-handed tool in the fall," she said. "It will have one-hand-deployable pliers, but we have improved upon them in that they are spring-loaded. For a long time nobody could figure out how to put that spring in the design and still get a nice, smooth deployment on them with one hand. All the blades and tools will be on the outside, all one-hand-deployable and all lockable."

Additional features specifically targeting military users include a threaded attachment on the side to allow the tool to serve as a handle for a weapons cleaning rod, a strap cutter and an integrated oxygen tank wrench.

"The oxygen tanks come with wrenches," Warner noted, "but they always get lost from the tank."

OHT will come in two models: Cerakote coyote tan and black oxide black. A MOLLE sheath is still being perfected as of this writing.

"Our dream would be to have this issued to soldiers through the RFI so that they could really have a quality tool that they aren't having to buy themselves," Warner added.

Leatherman will also be introducing another new military tool over the next few months. Dubbed Z-Rex, the tool is a hard anodized aluminum strap cutter/glass breaker.

"It's lightweight but very strong," Warner said. "The strap cutters themselves are 'indexible' and in the shape of a Z, hence the name Z-Rex. You can switch the cutters by flipping them out in the field, or if you need a whole new pair, you can just replace them. It has a large handle hole for your finger so that you won't drop it. On the back end of the tool is a carbide glass breaker. A lot of tools right now use stainless steel, but they don't break glass. ... The best materials are diamond, porcelain or carbide. Porcelain is incredibly expensive to work with, form and ... meld into the body. So we chose carbide. We've also included hex wrench and oxygen wrench cutouts on the tool handle."

Ontario Knife Company

According to K. Sue Green, quality control manager/contract administrator for Ontario Knife Company, Ontario's strap cutter has been with the services "for years"

Scott R. Gourley, a freelance writer, is a contributing editor to ARMY.

Under the patronage of His Highness Sheikh Khalifa Bin Zayed Al Nahyan
President of the UAE & Supreme Commander of the UAE Armed Forces

17-21 February 2013
ADNEC, Abu Dhabi, United Arab Emirates

IDEX ايدكس 2013

DEFENCE TECHNOLOGY FOR THE FUTURE.

The Middle East and North Africa's largest defence and security exhibition returns to Abu Dhabi in February 2013. Where the global defence industry will meet influential VIP's, decision makers, military personnel and key investors at IDEX 2013.

To book an exhibition stand or outside space email info@idexuae.ae

For detailed information about IDEX 2013 visit www.idexuae.ae

Headline Sponsor: TAWAZUN تـــــــوازن

Organised by: ADNEC

In association with: UAE Armed Forces

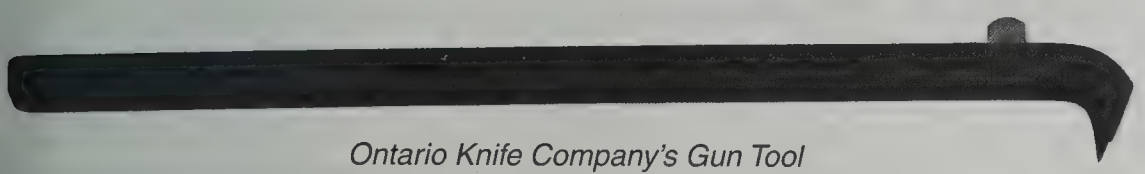
Co-located with: NAVDEX NAVAL DEFENCE EXHIBITION 2013

Ontario Knife Company's Coast Guard Knife

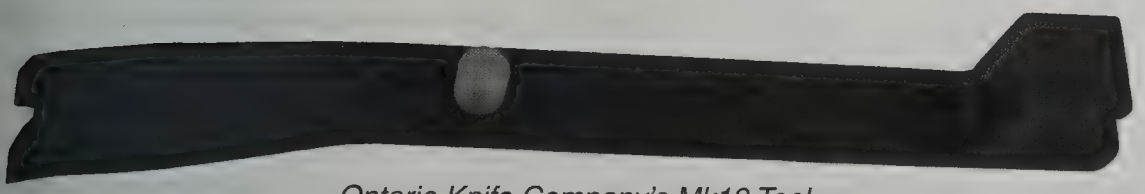
and "has been adapted by other companies along the way."

Outlining a range of new military product offerings for 2012, Green pointed to a new survival knife, a set of "gun tools for the Army" and related knife products.

Ontario Knife Company's Gun Tool



Ontario Knife Company's Gun Tool



Ontario Knife Company's Mk19 Tool

"Our new HEST [Hostile Environment Survival Tool] knife was designed by Robert Pelton with multiple functions of pry bar, glass breaker, wire breaker and opener," she said. "The knife itself is so utilitarian."

"We also have a new rescue knife designed for rescue swimmers in the Navy or Coast Guard or anyone who is a diver," she explained. The knife's blunt tip was designed to avoid stabbings when cutting someone free.

Ontario is also introducing a new set of gun tools to facilitate operations on the Mk 19 40 mm grenade launcher, M2 .50-caliber machine gun and the M240 series 7.62 mm machine gun.

"You can get them as a kit or separately," Green explained. "The Mk 19 tool will pop out the shells if they get hot or stick. It has a PVC [polyvinyl chloride] bumper so that you can pound without causing any damage to the gun. There's also a realignment tool on the back that [spares] a lot of knuckles. The .50-caliber tool is for the spacing and timing. The 240 tool is for the pins and also has a bumper made out of PVC."

Another new knife drawing military interest is the Blackbird SK-5. Designed by Paul Scheiter, the knife measures 10 inches overall with a 0.13-inch-thick, 5-inch-long, 154CM high carbon stainless steel blade with full-taper grind. It's housed in a MOLLE-compatible sheath.

"This knife is focused on simplicity," Scheiter said, "and because it is simple and ergonomic it is intuitive to use. There is very little that can go wrong with this in the field—especially under heavy use. Ironically, because we put fewer features and gadgets on it, it actually functions in far more capacities. It's thick enough that you can 'baton' through a really thick piece of wood with it. It's also thin enough that you will be able to do prolonged carving with it, because it delivers a very sharp edge."

Ontario Knife Company's SG3 Fixed Blade

Other new knife designs for 2012 include the OKC SG3 fixed-blade design, a straight-blade evolution utilizing the same handle design as the company's automatic design that has gained popularity with military users over the past few years. ★

CompanyCommand

Building Combat-Ready Teams

To: Company Commanders
From: Company Commanders of 1st Armored Brigade Combat Team, 1st Cavalry Division (Iron Horse)

Partnering with Kuwaiti Land Forces

Deployments to Iraq may have ended, but deployments to the Arabian Peninsula have not. Last December, we—the troopers of 1st Armored Brigade Combat Team, 1st Cavalry Division—were among the last American forces to depart Iraq. Reunions with our families were postponed for six months, however, when we received the mission to become the first brigade to partner with Kuwaiti forces in support of Operation Spartan Shield.

We immediately established our footprint on Camp Buehring, Kuwait, and began to partner with all four maneuver brigades of the Kuwaiti land forces [KLF] as well as its field artillery regiment. On our own initiative we put together a book as a way to share what we've learned with the commanders who will follow in our footsteps. What follows are excerpts from our *Iraq and Kuwait Commander AAR Book* [after action review].

Leaving Iraq

CPT Michael Gensert
C/2-8 CAV

I was surprised by my interactions with the Iraqi people. During my first two deployments most of my interactions with the populace were not positive. The local populace did not want us there and they let us know it. This time, however, the number of positive interactions with the populace was astounding. Many of them genuinely appreciated our presence, were thankful for everything that the United States had done for Iraq and wanted the United States to stay longer in the country.

CPT Timothy Martin
A/1-82 FA

The general attitude of the Iraqis toward U.S. forces during the final days of Operation New Dawn was a sea change from previous deployments. The general feeling was that the Iraqi security forces [ISF] were trying to "hedge their bets" in advance of the U.S. withdrawal. Also, as the CERP [commander's emergency response program] funds began to disappear, the Iraqis realized that there was little to gain through assisting U.S. forces, so they thought to mitigate their risk by disassociation. In previous deployments, the prospect of infrastructure development projects forced the ISF to be engaged; this deployment was significantly different.

CPT Douglas McDonough
A&G (FSC)/1-82 FA

The defining moment for me during this deployment was the tactical road march out of Iraq. It was significant on multiple levels. First, it was a time of reflection. The seven years of my career have been consumed by the conflict. I have lost friends and Soldiers. I have seen the extremes of humanity—moments that made me extremely proud of my fellowman, and moments of shame and despair. There are memories from Iraq that will stay with me for a lifetime: the day the gunner of my truck was killed by an IED [improvised explosive device] strike after he volunteered to go on a mission with another platoon; the days spent training the Sons of Iraq; the smell of cooking oil as an Iraqi family prepared dinner while I searched their home with my platoon.

Iraq changed me as a leader and as a man. I matured as a leader. Iraq forced me to make tough decisions, and it forced me to discipline my Soldiers. In garrison, I had shied away from discipline, leaving that to my NCOs [noncommissioned officers]. In Iraq, a lack of discipline results in a significant emotional event (e.g., mass drug use, lost sensitive item, casualties). I quickly realized that all leaders have a part to play in ensuring good order and discipline within their formations. I no longer shied away from making on-the-spot corrections, and I conducted my PCCs/PCIs [precombat checks/precombat inspections]. I found that my Soldiers and NCOs respected me more for enforcing good order and discipline rather than for being the nice guy.

On another level, the road march was a source of great pride. We closed out Iraq with dignity and honor. There were no images of helicopters being pushed off aircraft carriers or civilians climbing onto one of the last helicopters leaving the country. In fact, there were very few images at all. We properly closed out Iraq: We left with all of our equipment and in an orderly fashion. The road march itself was very smooth. Our task force had a plan, we rehearsed the plan and we ex-

ecuted flawlessly. It made me proud of the Soldiers and NCOs within my command. In short, this was a culminating event not only for our country, but for each Soldier who participated in it and for our Army as a whole.

Working with the Kuwaiti Land Forces

CPT Jonathan Doersch
B/1-7 CAV

As a troop, we worked fairly extensively with Kuwaiti land forces while stationed at Camp Buehring. It is something that I highly recommend to anyone who has worked with Iraqi or Afghan forces; you will find the experience rewarding and nothing like working with ISF or Afghan national security forces [ANSF]. The interaction is much easier, with Kuwaitis being fairly modern and western, and many of them speak fairly good English, which makes communication much easier. One thing to note on communication is that they will often pretend not to speak English as well as they actually do, either due to modesty or to eavesdrop. When dealing with their officers, the best bet is to treat them as you would someone of the same rank in the U.S. Army. Most of the KLF senior officers have combat experience and have completed a lot of the same schooling as U.S. officers of the same grade. You don't need to be overly gracious or worry about too many of the Arab world's unique customs. Just be polite and act like you are in someone's office back in the States, and you will be fine.

From a training standpoint, dealing with the Kuwaiti Army is also a fairly good experience. I have seen only a select few Afghan soldiers (whose lives depended on it) take training as seriously as the Kuwaitis did during our partnered training. The Kuwaiti officer corps is very competent and professional, and many of them are trained at western schools and military academies. More often than not, you are able to use the standard U.S. military doctrinal language when talking with them about training and operations, and even when the translation is a little off, explaining what you mean is not very difficult. Kuwaiti soldiers, for the most part, are decent, although there seems to be a cultural ADD [attention deficit disorder] that makes training with them more difficult than it would be if you could keep their attention. The key to making training events effective with Kuwaiti soldiers is getting through to them in a way that keeps their focus. Hands-on events are far more successful than having them sit through a PowerPoint slide show or a lecture on a whiteboard.

The one thing that is difficult when training with Kuwaiti forces is that they sometimes come across as acting extremely lazy. Their training days are very short, starting around 0800 and only going to about 1300. There are breaks for prayer and a late breakfast during their day, and if it's too hot or cold, they won't train. By the beginning of May, it is mostly too hot for them to do much training, and getting them to do much of anything outdoors is a lost cause. Also, most of them are out of shape, as their PT [physical training] involves walking with lots of talking and cigarette smoking. This negatively impacts their ability to train iteratively, as they become too tired to train with rapid turns or recocks. When they are training, however, they are very good. They are able to conduct live fires and ranges safely and on their own, with leaders taking charge and ensuring things are done right. There is quite a bit of untapped competence within their NCO ranks as well. Their culture is such that NCOs don't have the ability to make things happen as ours do, but for the most part, if you can get them to come to the forefront, you will see that they know what to do and are good at it.

1st Armored Brigade Combat Team, 1st Cavalry Division, partnered with Kuwaiti forces.

CPT Mike Kiser
A/1-7 CAV

The Kuwaitis are more professional than the ISF and much easier to partner with effectively. Their command structure, however, is much more commander-oriented than we are used to. A battalion commander has a virtual blank training calendar to work with, and how it gets filled is generally entirely up to him. This makes each battalion unique.

My particular partner battalion had a commander who was not interested in partnered training, so my troop did only a few limited events with the KLF. My sister troop, on the other hand, was partnered with a KLF battalion whose commander was extremely interested in joint training. They conducted partnership events weekly, including a two-week density with daily activities.

The KLF is extremely officer-centric. NCOs have virtually no authority and are best compared to the old specialist 5/6 ranks in terms of responsibility. To be effective, all joint training needs to involve the Kuwaiti platoon leaders and company commanders. The average company is roughly the size of a rifle platoon (40–50 people), and training is centralized and directed through the battalion headquarters.

The Kuwaiti work week is Sunday to Thursday. This is reflected in the Udairi Range Complex's operations in that no

Kuwait offers little variation in terrain or elevation, but the wide open space provides plenty of opportunity to practice mounted maneuver. The climate affects operations in the country; sudden dust storms halted operations many times.

firing of any caliber is permitted on Friday or Saturday when the Kuwaiti liaisons are off work. To better facilitate training and partnership, units need to align their work week to the Kuwaiti work week and consider Sunday to Thursday prime training days, with the weekend being Friday and Saturday.

CPT David Sherck
B&D (FST)/1-7 CAV

Across all levels we found the quality, professionalism and knowledge of the Kuwaitis to be far higher than what we had come to expect from working with the Iraqi army. As we discussed leadership and logistics with the Kuwaitis, we discovered that their systems are very similar to ours, and that they have many of the same issues and challenges that we face. The Kuwaiti systems are established and functional enough, and the NCOs and officers knowledgeable enough, that there was a true professional discussion and exchange of TTPs [tactics, techniques and procedures]. The Kuwaitis want U.S. approval of what they are doing and often feel inferior, wanting to push the United States into the lead in the relationship, even if what they are doing is of high quality. It is difficult to get them confident enough to participate as equal partners, but it's worthwhile when they do. A particularly good exchange was when our small-arms repair NCOs did M2 .50-caliber machine-gun maintenance with the Kuwaitis. At first the Kuwaitis just wanted us to teach them what we knew, but it was clear from the interaction of their NCOs and soldiers and the questions they asked that they had a high level of expertise. We guided the training to exploit this and ended up with both the Kuwaiti NCOs and our NCOs evaluating Soldiers of both armies on the tasks we were training.

Training in Kuwait

CPT Micah J. Chapman
B/2-5 CAV

Upon first glance, Kuwait appears to offer little training value to a mechanized infantry company. A commander however, who has a clear vision for training and what he expects to accomplish during a rotation to Kuwait can effectively complete about three times the training that could be completed at any home-station location in the same time period. Kuwait offers little to no variations in terrain or elevation but micro-terrain that covers the barren desert provides fantastic opportunities to train mechanized infantry. The wide open terrain offers excellent opportunities to practice mounted maneuver, enabling platoons to utilize movement formations and vary movement techniques while doing traveling, traveling overwatch and bounding. A few of the training areas surrounding Camp Buehring are capable of supporting company-sized movement formations; the length of the movement, however, is restricted to approximately 15 kilometers. The micro-terrain allows Bradley Fighting Vehicles to employ berm drills and conduct reconnaissance. A leader's reconnaissance becomes critical when planning training because quality terrain on which to emplace an enemy objective or to employ dismounted infantry is sparse at best. Tailoring missions to the terrain available is critical to conducting valuable training.

CPT Benjamin A. Welch
C/1-7 CAV

The weather in Kuwait, for the most part, remains dry and warm, but the atmosphere can change very quickly. In your planning process, focus on the second- and third-order effects that dust will have on your operations. Many times, op

Clockwise from left, Micah J. Chapman (left), 2nd Battalion, 5th Cavalry, found that "quality terrain on which to emplace an enemy objective or to employ dismounted infantry is sparse at best." The micro-terrain in Kuwait allows Bradley Fighting Vehicles to employ berm drills and conduct reconnaissance. A gun crew prepares for action.

erations were halted due to sudden dust storms. The first day our squadron gunnery was completely shut down due to high winds and dust. The moment my troop occupied the range, winds kicked, creating a dust wall that limited visibility to about 25 feet. Gunners could not identify targets to boresight their weapon systems. Targets were blown away, causing a very slow throughput on the range. Air medevac [medical evacuation] and road CASEVAC [casualty evacuation] went red, causing our element to be fixed on the range until a "red air memo" was produced. Leaders training in Kuwait should plan for the dust to impact their operations and have red-air documentation and alternate ground-CASEVAC plans in place prior to execution.

CPT Thelma L. McQuarley
A/115 BSB

The sandstorms have been a huge challenge. When storms get bad enough, the roads close and air assets go red, so all training and support missions are suspended. In the planning process, it is very important to build makeup days into your training schedule. The heat and sandy terrain also play a major role in how we plan training and operations. We moved PT to 0500 in the morning due to the temperatures rising early in the mornings. The soft sand has proven to be a hindrance in the deployment of some of our equipment on missions outside of the camp. Our HET [heavy equipment transporter] systems that haul M1 tanks, Bradleys and other heavy equipment are greatly restricted on where they can safely travel. These restrictions have caused us to work even closer with the units we are supporting to coordinate link-up and drop-off points for their equipment. The second- and third-order effects of the terrain have greatly altered both our planning and our execution of various missions.

Leading Soldiers and Families While Deployed to Kuwait

CPT Concho Moore
B/2-8 CAV

One of the most difficult things about being deployed to Kuwait is that it is similar to a home-station environment in every aspect except the mission. Soldiers must understand the mission and why it is so important for them to be here, or else morale will fade once the newness of the situation erodes. It is hard for Soldiers to comprehend the importance of being here because they cannot see their impact. They have to be told how they are influencing the strategic objective and exactly how they tie into the big picture. Events that Soldiers would normally be allowed to take leave for—such as a death in the family that does not meet emergency-leave criteria—will not necessarily be approved. This will weigh heavily on their minds and will breed discipline issues if they cannot understand their individual roles and purpose here. It is up to leaders to ensure that we provide our Soldiers with a sense of purpose in order for them to take ownership of the mission.

Soldiers dismount their Bradley at the end of a training exercise. Leaders found that having many different training opportunities available to their soldiers at Camp Buehring helped combat the complacency some troops developed from the apparent lack of a mission in Kuwait compared to Iraq.

CPT Benjamin Welch
C/1-7 CAV

Manage time! Emplace time-management battle rhythms in your organizations to define when the normal workday is and when individuals have time off. Yes, I know time off is like nails on a chalkboard for most leaders, but if you think the majority of your unit will sustain 24/7 operations while in Kuwait, you might want to rethink your position. Soldiers need down time, but if you don't specify when that time is, they will gladly identify it for you. What worked best for our troop was maintaining a battle rhythm that had only one formation a day, at exactly 0845. Any time prior to 0845, platoons could do PT, personal hygiene, chow and even laundry. Following troop formation, at approximately 0900, the workday promptly began and did not end until after evening chow at approximately 1930. The time from 1930–2200 was set aside for personal time, focusing specifically on Soldiers contacting their families. Soldiers were encouraged to call, Skype, chat or even write letters during this time. Simply put, leaders left them alone. I'm not saying to let standards go out the window, but give Soldiers some space. If you manage what time they have off, during the workday your organization will execute like a well-oiled machine.

The importance of your Family Readiness Group [FRG] cannot be overlooked prior to deploying. Many units kick off deployments focusing all their organizational energy on their organic formations (platoons and sections). This surge is perfectly normal, but sooner rather than later you'll need to get your FRG back in the fight. One concept I adopted was to look at my FRG as another platoon in our formation. If you do this and feed your FRG leaders the majority of the information you would give to your leaders, obviously applying OPSEC [operations security], it will unite your organizations both forward and in the rear. The cohesion of your FRG will not seem very important during the first quarter of your deployment, but by the second and third quarters, having free-flowing information from the rear will become very useful. Soldiers' issues will begin to bubble to the surface, and an effective FRG will keep you informed and allow you and your leaders to identify and resolve issues in the troop before they become very serious.

CPT Mark A. Renteria
HHC/115 BSB

Complacency has been a big issue since we arrived in Kuwait. Every Soldier in my company was used to having a mission while in Iraq. Since arriving in Kuwait, many of these Soldiers have not been as engaged as they once were and find it difficult to find their lot in life. We have combated complacency by having many different training opportunities for the company and providing outlets for all Soldiers at the MWR [morale, welfare and recreation] activities.

Know your Soldiers and cross-train. Many Soldiers have issues that pop up at the last minute that you are not aware of, and the company is affected when they are taken out o the fight. Losing one individual, regardless of rank, should not affect the entire unit, but by cross-training and building depth in all slots, the unit will be better prepared for execution of all operations.

You can read all 30 commanders' entire AARs in the Iraq and Kuwait Commander AAR Book *(1st Armored Brigade Combat Team, 1st Cavalry Division), which is available online in the CompanyCommand forum (http://CC.army.mil) and the Center for Army Lessons Learned (https://call.army.mil). If your unit would like assistance developing your own company-level commander AAR book, contact the CC team at cocmd.team@us.army.mil.*

Soldier Armed

Armored Multi-Purpose Vehicle

By Scott R. Gourley

The Army is completing the analysis of alternatives (AoA) for its Armored Multi-Purpose Vehicle (AMPV). The AMPV family will replace the M113 series of armored personnel carriers and mission-based platforms currently serving in five mission roles within the Army's heavy brigade combat teams (HBCT): general purpose, mortar carrier vehicle, mission command (MCmd), medical evacuation vehicle and medical treatment vehicle.

Service representatives note that the intent of AMPV is to replace all mission roles simultaneously with one or more solutions. Although they emphasize that AMPV is not a mission equipment package (MEP) development program, they note that the vehicle/integration program should use existing M113 MEP when possible.

AMPV will replace the approximately 3,000 M113-series platforms in the Army's HBCTs that make up a considerable portion of the entire HBCT fleet. The initial program focus will be on M113 systems within the HBCT with M113 replacement for echelons above brigade viewed as a later decision with potentially different requirements.

The AMPV effort stems from the Army's termination of the M113 program in 2007, the result of inadequate force protection and the inability of size, weight, power and cooling to incorporate future technologies and the inbound Army's network.

In February, the Defense Acquisition Executive approved the materiel development decision and granted the Army approval to enter into the materiel solutions analysis phase for AMPV. That decision allowed the Army to perform an analysis of alternatives to determine the most cost-effective replacement strategy for the Armored Personnel Carrier M113 family of vehicles (FoVs). As part of the AoA, the Army was directed to examine the current M113, current and modified existing vehicles (Bradley, M113 upgrades, MRAP and Stryker vehicles), other nondevelopmental items or modified nondevelopmental items, new start vehicles such as the Ground Combat Vehicle and Joint Light Tactical Vehicle, or a combination of these alternatives.

The AoA process began with a "sources sought" announcement in mid-February calling for industry data that could support the AoA "and any potential future acquisition efforts."

That market survey was followed by an April 2012 "Industry Day" that further expanded communications. In addition, the Army also enhanced industry knowledge of current M113 MEP configurations by providing opportunities for the physical inspection of current systems like the M113A3 Full Tracked Armored Personnel Carrier, M1064A3 Self-Propelled 120 mm M121 Mortar Carrier, M1068A3 Standardized Integrated Command Post System Carrier and M577A3 Light Tracked Command Post Carrier.

Not surprisingly, industry interest in AMPV was evident long before the AoA process.

In a discussion of the potential opportunity at last year's AUSA Annual Meeting and Exposition in October, Mike Cannon, senior vice president for ground combat systems at General Dynamics Land Systems (GDLS) said, "We are strongly pushing Stryker as the AMPV vehicle of choice."

"We don't think you have to do anything to a Stryker in order to replace 113s, and that's why we have three vehicles on the floor right now. We have a medical evacuation vehicle (the best ambulance in the world); an infantry carrier vehicle, which would be the 113

In its Mission Command role, the Armored Multi-Purpose Vehicle (AMPV) will likely replace M577 series variants of the M113 family of vehicles like this one shown at the Network Integration Evaluation 12.2 at White Sands Missile Range, N.M.

Scott Gourley

The M113-based M577 armored vehicle is one of approximately 3,000 M113 series platforms that will eventually be replaced with the AMPV.

utility vehicle; and a command variant, which would be the 577 equivalent.

"We think the Army can get started quickly if they pick Stryker and start moving out," Cannon added, "but we're willing to wait on the analysis of alternatives because we think it will be very favorable for Stryker."

More recently, Don Kotchman, vice president, HBCT programs at GDLS, said, "Leveraging the strength of the Stryker Double-V Hull vehicle, General Dynamics is working to meet the Army's requirements and preferences for its AMPV solution. Our vehicle is built to meet all mobility, cost and schedule requirements of the Army while being less expensive to operate. In addition, General Dynamics' AMPV candidate will significantly exceed the survivability requirements of the AMPV solution."

Roy Perkins, director of market creation for Army Combat Systems at BAE Systems, was quick to note how the Bradley chassis could optimize specific AMPV variant roles. In the case of the Mortar Carrier, for example, he said, "Right now the 113-based mortar vehicle can carry 69 rounds and can fire a little bit farther than 7 kilometers. If you put it inside a Bradley, then that mortar vehicle probably will have a little bit longer range, just because the vehicle is more stable, and it will be able to carry more rounds because it's a bigger vehicle. If the Army says that it wants to keep the same racks, then we'll put 69 rounds in there, but if we're allowed to go to a different type of rack system, which has shown in public already, we can almost double the round count."

"Concerning the general purpose vehicle," he continued, "right now the first sergeant's M113 is used for things like security perimeters or unit logistics roles. Just the sheer volume that you would have on a Bradley vehicle versus a 113 allows you to carry a lot more, and it allows you to carry expedient litters. Yes, there are ambulances on the battlefield, but people often forget that every vehicle needs to have ambulance capability."

"That's a good segue into the [AMPV Medical Evacuation] vehicle," he added. "Right now an M113 ambulance can carry four litters—that's it—and it uses a very old pulley-and-chain system to move those litters around. By going with a Bradley with the ambulance lift out of the Caiman MRAP, which we have shown at medical conferences and at AUSA gatherings, not only can you put in four litters, you also have the room to work on patients while they are in there. With the current M113 ambulance there is no room to work on patients while they are in the rack system."

Turning to the MCmd AMPV variant, Perkins acknowledged, "The biggest problem that the M1068 has right now is that you are bouncing around so much when it's moving, and with the way the comms systems are laid out, you really can't operate it while it's on the move. But with the Bradley, there is more volume and a little bit smoother ride, so you should be able to operate it on the move."

One potential modification for the MCmd variant would be to increase the height of the hull. "It really depends on what the Army states in the request for proposal (RFP)," Perkins noted. "The vehicle [concept] we have shown at conferences for the M1068 role is a hi-back. We've shown the ability to put on a low-back, medium-back and hi-back. So it really depends on what the Army wants in the RFP. There are some mission roles for which they may really want that [hi-back] standing height. The fire direction center is a good example."

Perkins emphasized that another likely modification that would be of importance to all soldiers is the fact that all of the BAE Systems AMPVs are outfitted "with the Bradley Urban Survivability Kit [BUSK]. At the start of the war the Bradley had some survivability issues, but since we have been installing BUSK—beginning in about 2006—there has been only one casualty in a Bradley, and it continued in the fight until about 2009. By going with a BAE Systems-led A3 Bradley baseline you get all of the survivability enhancements that have been added to the Bradley."

The analysis of alternatives was scheduled to conclude around the end of July with the results used to feed/finalize requirements and inform the capabilities development document which is awaiting revisions.

Pending an approved acquisition strategy, the AMPV request for proposal is targeted for release sometime in the period from the first to the third quarters of fiscal year (FY) 2013, with production slated to begin as early as FY 2015.

Service sources note, however, that the production start date could be as late as FY 2017. ★

Reviews

Shiloh's Significance

hiloh, 1862. *Winston Groom. The National Geographic Society. 446 pages; black-and-white photographs; maps; notes; index; bibliography; $30.00. www.nationalgeographic.com/books.*

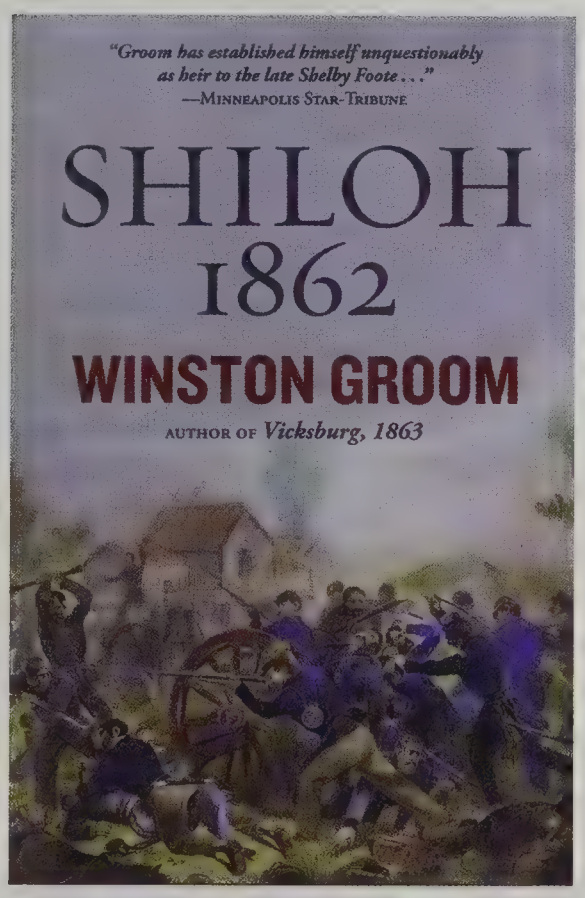
By COL Cole C. Kingseed
U.S. Army retired

In considering the Battle of Shiloh on April 6–7, 1862, historian Otto Eisenchiml wrote, "I consider Shiloh the most dramatic battle ever fought on American soil. ... True, Gettysburg was bigger; Vicksburg was more decisive; Antietam even more bloody, but no other battle was interwoven with so many momentous *ifs*. If any of these 's had gone the other way, it would ave had incalculable consequences."

To commemorate the sesquicentenial of the first great and terrible battle f the Civil War, Winston Groom has roduced a masterful account of the attle that served as a harbinger for enagements that produced far greater asualties and more wholesale slaughr in the most devastating conflict in merican history.

More widely known for writing *Forst Gump*, Groom brings a unique perpective to *Shiloh, 1862*. The author of *icksburg, 1863*; *Kearny's March: The pic Creation of the American West, 846–1847*; and *Shrouds of Glory: From tlanta to Nashville: The Last Great Camaign of the Civil War*, Groom relates a ood part of this story through the yes of just a score of the combatants. hese participants include Ambrose ierce, one of America's most well-ead authors, and Henry Morton Stan-y, a Confederate soldier in the Dixie irays who was later celebrated world-ride for his exploration of Africa. nion LTC James B. McPherson, whom oth Ulysses S. Grant and William T. herman predicted would one day ommand all the Union armies, and Confederate PVT Samuel R. Watkins of the First Tennessee Regiment, whose *Company Aytch* is often cited as the finest memoir of the war written by an individual soldier, add their personal recollections of the climactic battle.

Written more for the general reader than the military historian, *Shiloh, 1862* contains excellent maps through which the reader can easily follow the con-



duct of the battle. A detailed appendix that portrays the order of battle by both organizations and commanders further enhances the text. Through its compelling narrative, Groom's *Shiloh, 1862* serves as a fitting complement to his *Vicksburg, 1863*.

What makes Groom's account so gripping is his ability to place Shiloh in historical context and his development of the principal combatants. In the spring of 1862, most Americans hoped that the war would be over by late summer. Though the Battle of Bull Run had shocked the public with its 5,000 casualties the previous year, news of the two-day battle in southern Tennessee and its 23,741 casualties altered the course of the war. More soldiers fell at Shiloh than all the United States' previous wars combined.

No soldier who experienced Shiloh would ever be the same. The vast majority of combatants had never heard a shot fired in anger. Thousands of previously untested soldiers "had now seen the elephant." Immediately following the engagement, then-COL Thomas Jordan, GEN Pierre G. T. Beauregard's chief of staff who planned the battle, compared the current state of the southern army to "a lump of sugar, thoroughly soaked with water, yet preserving its original shape, though ready to dissolve." Said Sam Watkins, "It all seemed to me a dream." Indeed, Shiloh remained a living nightmare that no one could possibly forget.

Readers will find Groom's description of the commanders most interesting. Few of the Confederate commanders emerge from these pages with accolades. Confederate commanding general Albert S. Johnston, whom the South's president, Jefferson Davis, considered the finest soldier in Confederate service, approved an unsophisticated battle plan that pitted "Southern dash against Northern pluck and endurance." Beauregard, who succeeded the fallen Johnston in command of the Army of the Mississippi, emerges as a fainthearted commander and the "liar in chief" for fabricating reasons to justify his order to halt the firing when the Confederate army was on the verge of success after the first day of fighting. Only Nathan Bedford Forrest, whose cavalry was grossly misused during the battle, receives Groom's high praise.

In contrast, Shiloh "made" Ulysses S. Grant. Though he committed numerous tactical errors and gravely underestimated his opponent's intention, Grant remained unfazed by the chaos and even more resolute in his determination to turn initial defeat into ulti-

mate victory. According to Grbom, "The remarkable thing about Grant, was that he was so *unremarkable*." If Shiloh demonstrated anything to Grant, it ended his illusion of a short war and a peaceful resolution of the differences between North and South. This horrific battle convinced Grant that the South would only submit if Federal armies occupied the interior of the Confederacy and Union forces forced all Southern armies to capitulate. President Abraham Lincoln concurred and became Grant's staunchest defender.

On the debit side, a few factual inaccuracies sprinkle the text. Grant never commanded the Army of the Potomac during the final year of the war. Grant actually served as general-in-chief of all Union armies beginning in March 1864 after Lincoln called him to Washington and promoted him to the rank of lieutenant general. In addition, it took Grant 13 months, not two blood-stained years, to lay siege to and subdue Lee's Army of Northern Virginia outside Richmond.

Shiloh's ultimate significance is that it alerted both North and South that the war would now be characterize more by wholesale butchery than éla and patriotism. Shiloh further attestec that changing technology in weaponr now required significant alteration in Napoleonic tactics. Unsupporte frontal assaults could lead to appallin casualties. Regrettably, few of the battl leaders learned the hard lessons of th battle that forever changed the Ameri can landscape.

***COL Cole C. Kingseed**, USA Ret., Ph.D., former professor of history at the U.S. Mi itary Academy, is a writer and consultant*

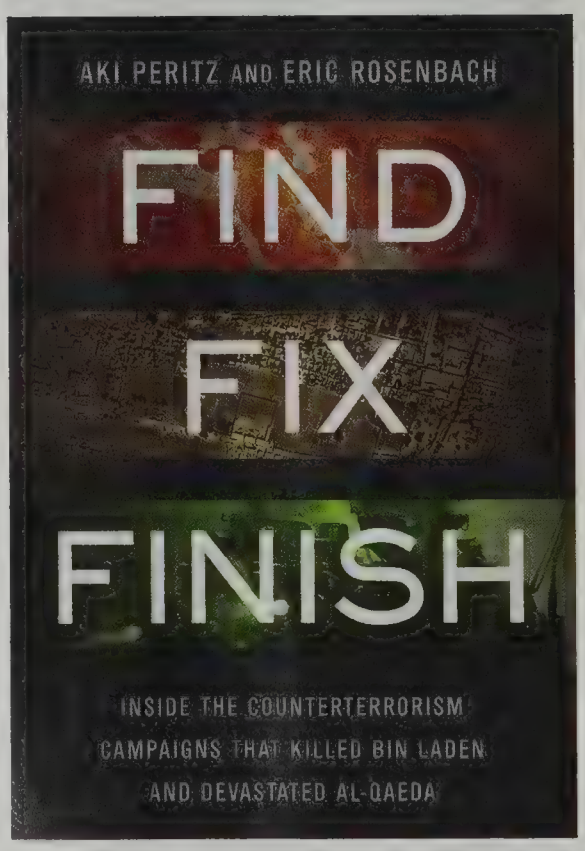
Counterterrorism Post-9/11

Find, Fix, Finish: Inside the Counterterrorism Campaigns That Killed Bin Laden and Devastated Al-Qaeda. *Aki Peritz and Eric Rosenbach. Public Affairs. 308 pages; appendices; notes; indices; $27.99. Publisher website: www.publicaffairsbooks.com.*

By COL Gregory Fontenot
U.S. Army retired

In the conclusion of Roberta Wohlstetter's brilliant assessment of intelligence and decision making in the months before Pearl Harbor—*Pearl Harbor: Warning and Decision*—she observed that since Pearl Harbor, the United States had developed a robust and very expensive intelligence system employing incredible technology. Nonetheless, she argued, the balance of advantage in achieving surprise had "shifted … in favor of a surprise attacker." That was in 1962, when the problem was whether the United States might be surprised by the Soviet Union as it had been in December 1941 and June 1950.

Wohlstetter found that the surprise at Pearl Harbor stemmed from a number of factors including signal-to-noise ratio exacerbated by abysmally bureaucratic command-and-control systems, compartmentalization, bureaucratic squabbling and, perhaps above all, an inability to imagine the worst that could happen and find the idea plausible. Much the same has been written following the surprise attack of 9/11. In *Find, Fix, Finish*, Aki Peritz and Eric Rosenbach, like Wohlstetter, seek to understand the intelligence and decision-making process in Washington with respect to terrorism. In addition, they examine how the United States gradually developed the capacity to become reasonably effective at counterterrorism.



Those who read Peritz and Rosenbach will have taken a good first step on the road to understanding not only what happened that enabled surprise in September 2011 but also what has happened since and the implication for U.S. counterterrorism efforts in th future. The authors are conscious tha while operations are under way, cer tain limitations of what can be achieve exist. Much of what must be known t reach understanding remains classi fied, and too little is known of what th belligerents were—and are—thinkin to enable thorough analysis of wha they intended and how they reacted t U.S. efforts to find, fix and finish them

Theirs is an institutional approach They seek to understand how the va ious government bureaucracies, fro the Department of Defense to the De partment of Justice, interacted wit each other and how they responde and/or advised the executive and leg islative branches. What emerges is disheartening reminder that the mor things change the more they remai the same. These bureaucracies squab ble, maintain barriers and commun cate poorly among themselves an with those to whom they report. As i 1941, however, the 9/11 attacks galva nized the country, including the var ous components of the governmen Equally important, the United State learned to collaborate effectively wit most of its allies and at least achiev some measure of effectiveness eve with Pakistan, the most difficult of a lies.

Following the first attack on th World Trade Center in 1993 the Unite

States began to perceive the threat of terrorism and to react to that threat. President Clinton's Presidential Decision Directive (PDD) 39, "U.S. Policy on Counterterrorism," assigned responsibilities within government for deterring and responding to terrorism. Clinton continued to refine his directives with the publication of PDD 62 and 63 in 1998. The authors make a convincing argument that, despite these positive steps, funding did not really follow the guidance. Maintaining satellite infrastructure and other technical means took increasingly larger shares of reduced budgets. These systems were largely ineffective in detecting terrorist preparations, but the problem went beyond money to institutional weakness and aversion to risk, particularly in the CIA.

There were other institutional problems as well, including the obvious self-inflicted wound of "enhanced interrogation techniques." In discussing water boarding, among other things, Peritz and Rosenbach's treatment of the problem is tentative and fails to address some of the institutional dilemmas posed by terrorism as a technique. They seem inclined to view terrorist attacks as crimes. What is not clear from their argument is whether international and U.S. law really address terrorism as a tactic or as an illegal act. Does treating terrorism as a crime imply a requirement to rehabilitate the criminal and return him to society and, if so, where? These questions have not proven easy to answer, and *Find, Fix, Finish* fails to answer them, too.

Peritz and Rosenbach find their footing in addressing the systematic improvement of U.S. counterterrorism efforts. The means to do so stem from legal authorities granted in legislation such as the Patriot Act, improved collaboration within the government and with allies, and sheer determination. This is the heart of their argument, which they support by citing such events as Operation Overt, the name British authorities assigned to a terrorist plot to attack transatlantic airliners, and the arrest and conviction of Najibullah Zazi.

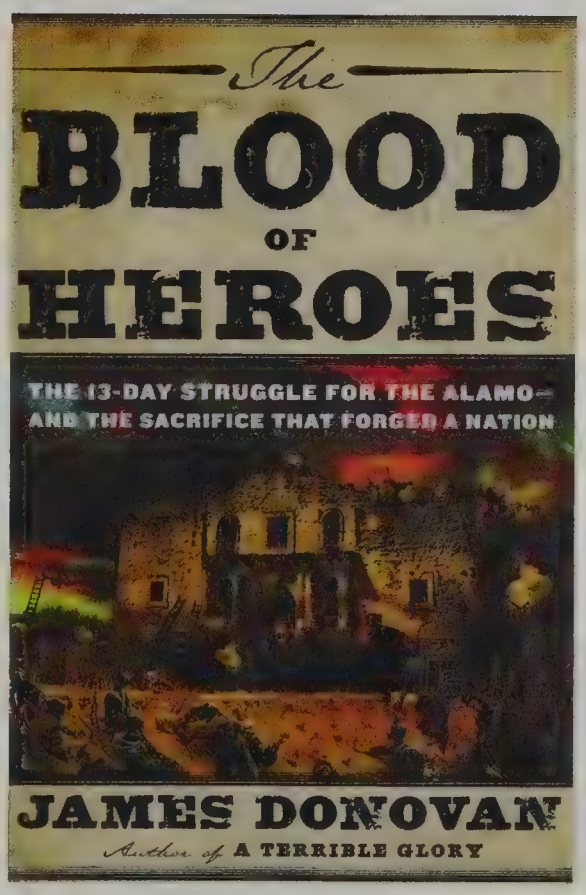
The authors are equally adept at identifying the problems allied governments confronted and the potential threats to civil liberties posed as these governments attempted to protect their populations without undue compromise of personal liberty. They find cause both for optimism and some alarm. The well-developed argument Peritz and Rosenbach make suffers a few distracting and unnecessary flaws. Since Peritz served with the CIA and Rosenbach remains in government service, they submitted to a security review. The editors chose to show that certain words within passages had been redacted. A rewrite of the offending passages would have served the book's argument better. The chief and only serious criticism is that Peritz and Rosenbach seem to be very careful not to offend. That of course is the problem with writing about events that involve people who are still living. Despite this caveat, this is a useful addition to the bookshelves of serving officers.

***COL Gregory Fontenot**, USA Ret., commanded a tank battalion in Operation Desert Storm and an armor brigade in Bosnia. A former director of the School of Advanced Military Studies, he is coauthor of* On Point: The U.S. Army in Operation Iraqi Freedom *and is director of the University of Foreign Military and Cultural Studies.*

Defending the Alamo

The Blood of Heroes: The 13-Day Struggle for the Alamo—and the Sacrifice That Forged a Nation. *James Donovan. Little, Brown & Company. 501 pages; black-and-white photographs; maps; notes; bibliography; appendices; index; $29.99. Publisher website: www.hachettebookgroup.com/publishing_little-brown-and-company.aspx.*

By COL Cole C. Kingseed
U.S. Army retired



Few battles have been so seared into the American consciousness as the Battle of the Alamo, where fewer than 200 Texan defenders withstood a siege by more than 2,000 Mexican soldiers for 13 days before being overwhelmed and killed on March 6, 1836. In *The Blood of Heroes: The 13-Day Struggle for the Alamo—and the Sacrifice That Forged a Nation*, James Donovan combines exhaustive research with flowing narrative to produce a highly readable account of the battle that gave birth to the Republic of Texas.

Donovan is not only a first-rate historian but also a consummate storyteller. The author of *A Terrible Glory: Custer and the Little Bighorn—The Last Great Battle of the American West*, Donovan draws upon a plethora of U.S. and Mexican archives to produce the most comprehensive history of the battle since William C. Davis' *Three Roads to the Alamo: The Lives and Fortunes of David Crockett, James Bowie and William Barret Travis* in 1998. The subtitle of *The Blood of Heroes* reflects Donovan's personal bias of lending more credence to

the Texan version of the siege. Following two appendices that list the Mexican Army of Operations' principal officers and the names of the Alamo's defenders, 80 pages of explanatory notes examine the validity of the archival sources and separate the facts from the legend surrounding this epic battle. The notes alone make the book worth the purchase price.

As he did in analyzing the composition of the frontier cavalry of Custer in *A Terrible Glory*, Donovan provides an excellent description of Antonio López de Santa Anna's Army of Operations. The Mexican army of 1836 was top-heavy with officers, many of whom owed their commissions to political connections. The majority of the senior officers, however, were veterans who had fought alongside Santa Anna in previous engagements. The rank and file of the Army of Operations consisted of approximately 50 percent *permanentes* (the regular army forces) and about the same number of *activos* (active militia) along with some frontier presidial units.

At the heart of the Alamo story are Donovan's portraits of larger-than-life personalities of the principal combatants. Santa Anna emerges from these pages as a petty tyrant whose "only loyalty was to his own ambition." The self-proclaimed "Hero of the Fatherland" and self-styled "Napoleon of the West," Santa Anna offered the Texan "rebels" no quarter once his own army arrived on the scene. James Bowie, "the celebrated desperado" and land speculator, served as co-defender of the Alamo garrison before pneumonia forced him to relinquish command to 26-year-old William B. Travis. David Crockett is "the amiable cuss" who inspired the garrison with his quick wit and excellent marksmanship.

Donovan's hero, however, is Travis, who, along with Bowie, shared a single view of an independent Republic of Texas. Donovan begins and concludes his narrative with Travis. Donovan wholeheartedly concurs with historian Jonathan Kuykendall, who states that Travis "hungered and thirsted for fame—not the kind of fame which satisfies the ambition of the duelist and desperado, but the exalted fame which crowns the doer of great deeds in a good cause." Donovan goes to great lengths in the afterword to state his conviction that the line that Travis drew in the sand with his saber is fact not legend.

Though plagued with self-doubt before arriving in San Antonio de Béxar on February 3, 1836, Travis epitomized the mythical defender of the Alamo, "a revolutionary, of the most extreme type," a man who was all too willing to lay down his life for Texan independence. Donovan posits that it was Travis, not Bowie, who recognized that the Alamo was "the key of Texas from the Interior [since] without a footing here the enemy can do nothing against us in the Colonies." Santa Anna undoubtedly agreed, noting that "Béxar was held by the enemy, and it was necessary to open the door to our future operations by taking it."

Not surprisingly, Donovan takes a contrary view to many recent historians, such as Phillip Thomas Tucker *(Exodus from the Alamo: The Anatomy of the Last Stand Myth)*, who claim that Travis's defense was disjointed and poorly organized. That Santa Anna's assault on March 6 was brilliantly executed and caught the garrison by surprise is undeniable, but Donovan credits Travis with quickly rallying the garrison before he was cut down by a Mexican bullet.

Donovan also examines the many myths surrounding the defense of the Alamo. Did Davy Crockett surrender and was he executed on orders from Santa Anna? Donovan sees little evidence to support this scenario—certainly not enough to write it as history. Each of the accounts that suggest Crockett was executed after the battle—most notably José Enrique de la Peña's *With Santa Anna in Texas: A Personal Narrative of the Revolution*—have serious credibility problems according to Donovan.

Was a sizable portion of the Texan garrison forced from the Alamo into the open plain where it was overwhelmed by Mexican cavalry? All evidence points to the fact that 60 defenders

Save Time and Register Online

- Go to **www.ausa.org** and click on the small Annual Meeting image or the Annual Meeting link
- Fill out the registration form and click "Submit"
- Print your confirmation with your personalized bar code
- Bring this with your government-issued photo ID to the Registration Desk to pick up your badge

See you there!

22-24 OCTOBER 2012 • WASHINGTON, D.C

ASSOCIATION OF THE UNITED STATES ARMY
2425 Wilson Boulevard • Arlington, VA 22201
(703) 841-4300 • (800) 336-4570 • www.ausa.org

2012 AUSA

ANNUAL MEETING AND EXPOSITION

A Professional Development Forum

22-24 OCTOBER 2012 • WALTER E. WASHINGTON CONVENTION CENTER • WASHINGTON, D.C.

2012 ADVANCE TICKET ORDER FORM

Advance ticket orders available to members only

ORDERS MUST BE RECEIVED BY 28 SEPTEMBER 2012

Advance ticket purchases with badges will be held for pickup at the Ticket Pickup Counter of the Walter E. Washington Convention Center.
A government-issued photo identification will be required for pickup.

SPECIAL NOTE: SEPARATE TICKETS ARE REQUIRED FOR EACH FUNCTION.
BADGES AS WELL AS TICKETS ARE REQUIRED FOR ADMISSION TO ALL FUNCTIONS.

Function	Quantity	Price	Amount
Guard/Reserve Breakfast (22 Oct.)	_____	$40.00	_____
President's Reception (22 Oct.)	_____	$50.00	_____
Eisenhower Luncheon (23 Oct.)	_____	$60.00	_____
Army Civilians' Luncheon (24 Oct.)	_____	$50.00	_____
Marshall Memorial Reception (24 Oct.)	_____	$45.00	_____
Marshall Memorial Dinner (24 Oct.)	_____	$95.00	_____

Payment must accompany this order • Please print or type
No refunds for ticket orders cancelled after **28 SEPTEMBER 2012**
Cancellation in writing only

Total Amount $ _____

Americans with Disabilities Act (ADA): Check here ❑ if you need special arrangements.

RANK	FIRST NAME	INITIAL	LAST NAME	PHONE NO.
UNIT, CHAPTER, OR TITLE/COMPANY, ETC.				
ADDRESS (REQUIRED)			STATE ZIP	COUNTRY
FAX			E-MAIL	
GUEST NAME – PLEASE ATTACH SEPARATE SHEET FOR ADDITIONAL GUESTS				

AUSA MEMBERSHIP NUMBER

PAYMENT BY: ❑ CHECK ❑ VISA ❑ MASTERCARD ❑ AMEX

CARD EXPIRES MO. YR.

SIGNATURE _____

www.ausa.org

MAIL TO: Association of the United States Army
P.O. BOX 101560
Arlington, VA 22210-0860

FAX TO: 703-243-2589

were dispatched by Mexican cavalry stationed for precisely that reason.

Donovan also opines that Mexican casualties, greatly exaggerated by early Texan historians, actually numbered approximately 75 dead and 300 wounded, 75 of whom died later of their wounds. These figures are in line with accounts by Santa Anna, de la Peña, historian Tucker and Thomas Ricks Lindley's three-part article, "Mexican Casualties at Béxar."

Was the Alamo worth defending? Donovan thinks so. Not only had the Alamo purchased precious time for the fledgling Texas republic to organize its government and raise an army, but it also provided a much-needed cry for Texas independence. More than any other event of the Texas Revolution, the "sacrifice [of the Alamo's garrison] truly forged a nation that would one day join a country greater than itself."

COL Cole C. Kingseed, USA Ret., Ph.D., a former professor of history at the U.S. Military Academy, is a writer and consultant.

"You're taking terrorism *too* seriously!"

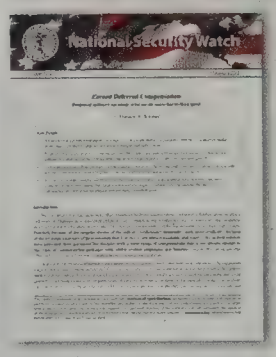
PUBLICATIONS
from the Institute of Land Warfare

Defense Reports
- DR 11-4 – Unleashing Unlimited Potential: The Army Warrior Care and Transition Program in 2011 (October 2011)[1]

Landpower Essays
- LPE 11-2 – Laying the Groundwork for the Army of 2020 by General Robert W. Cone (August 2011)[1]

Land Warfare Papers
- LWP 89 – Distilling the Demographic Dividend: Retaining U.S. Army Officer Talent for the 40-year Career? by Lieutenant Colonel Kevin D. Stringer (June 2012)[1]
- LWP 88W – The Spider Webs and the Lion: How Energy and Environmental Issues Entangle China by Colonel Mark Lee (May 2012)[2]
- LWP 87 – Historical Lessons Applied to the Current Technical Revolution in Military Affairs by Major Benjamin Huebschman (March 2012)[1]
- LWP 86 – Applying Natural System Metaphors to the Force Modernization Process by Colonel K. Todd Chamberlain (February 2012)[1]

National Security Watch
- NSW 12-4 – Earned Deferred Compensation by Nicholas R. Krueger (August 2012)[1]



- NSW 12-3 – Linking Latin America and the Pacific: A Strategy for the Long Term by Douglas J. Schaffer (July 2012)[1]
- NSW 12-2 – The Rationale for a Robust U.S. Army Presence in the Pacific Basin by Nicholas Krueger (March 2012)[1]
- NSW 12-1W – Thinking About the 21st Century Security Environment: The Need for a Whole-of-Government Approach by General Gordon R. Sullivan, USA Ret. (January 2012)[2]

NCO Update
- Summer Brings Free Passes and Special Deals to Servicemembers[3] (3rd Quarter 2012)[1]
- Budget Cuts Affect NCOs' Reenlistment Opportunities[3] (2nd Quarter 2012)[1]
- Tax Credits to Benefit Veterans Signed into Law[3] (1st Quarter 2012)[1]
- Three NCO Leaders Honored with Strickland Award[3] (4th Quarter 2011)[1]

Special Reports
- AUSA + 1st Session, 112th Congress = Some Good News (January 2012)[1]
- Fiscal Year 2012 Army Budget – An Analysis (October 2011)[1]
- Profile of the U.S. Army 2010: a reference handbook (July 2010)[1]
- Your Soldier, Your Army: A Parents' Guide by Vicki Cody (also available in Spanish)[1]

Torchbearer National Security Reports
- A New Equipping Strategy: Modernizing the U.S. Army of 2020 (June 2012)[1]
- Modernizing LandWarNet: Empowering America's Army (May 2012)[1]
- U.S. Army Space Capabilities: Enabling the Force of Decisive Action (May 2012)[1]

Torchbearer Issue Papers
- First Army: Training for Today's Requirements and Tomorrow's Contingencies (April 2012)[1]
- Third Army: Empowering Theater Responsiveness by Synchronizing Operational Maneuver (March 2012)[1]

Torchbearer Alerts
- Breaking the Faith (February 2012)[1]
- U.S. Army Retirees: Retired Pay and Health Care at Risk (September 2011)[1]

All publications are available free of charge at:
www.ausa.org/publications/ilw

To order these and other ILW publications, visit the Institute of Land Warfare at the AUSA website (www.ausa.org); send an e-mail to **ILWPublications@ausa.org**; call (800) 336-4570, ext. 4630; or write to AUSA's Institute of Land Warfare, ATTN: Publication Requests, 2425 Wilson Boulevard, Arlington, VA 22201-3326.

[1] Available on AUSA website at www.ausa.org/ilw.
[2] Available ONLY on AUSA website at www.ausa.org/ilw.
[3] Lead story.
[4] Winner of the 2011 AUSA/Army Capabilities Integration Center (ARCIC) writing contest

AUSA Sustaining Member Profile

Thomas G. Faria Corporation

Corporate Structure—Founded 1956 by Thomas G. Faria Sr. President and CEO: David M. Hickey. Headquarters: P.O. Box 983, 385 Norwich-New London Turnpike, Uncasville, CT 06382. Telephone: 860-848-9271. Website: www.faria-instruments.com.

The Thomas G. Faria Corporation is a vertically integrated International Organization for Standardization (ISO) 9001 company, manufacturing world-class instrumentation in Connecticut for more than 50 years. The company has grown from primarily producing tachometers for the marine and auto industries into a company that today offers a multitude of analog and digital engine-monitoring instruments to a wide range of global markets.

Faria got its start producing tachometers with the Ford Motor Company, designing and producing tachometers for the famed Mustang and Shelby Cobra and later supplying gauges to Volkswagen of America and Chrysler Corporation. During this early history Faria was producing more than 1 million tachometers per year.

By the late 1970s Faria's customer base expanded to include such industrial equipment manufacturers as Caterpillar, Allis Chalmers, International Harvester, Bobcat, and stationary power equipment and gen-set manufacturers, all of which found Faria instruments to be rugged enough to withstand the harshest environments.

In 1997 Faria became an ISO 9001 registered company and continues to maintain the same commitment to quality as an ISO 9001:2008 registered company. Faria has a long history of introducing innovative new technology to meet the growing needs of its customers.

Faria developed the first programmable electronic speedometer for motorcycles, all-terrain vehicles and snowmobiles. It has been a major supplier to Harley Davidson and Polaris, while also becoming the leading supplier of instruments to the recreational boat market.

Faria is also a major supplier of instrumentation to the U.S. military, providing instruments used in a wide range of vehicles including the M1A1 Abrams tank, personnel carriers and various other utility vehicles. More recently, Faria has been the preferred supplier for the cluster panels used in more than 230,000 Humvee vehicles around the world.

Today, Faria continues to push the boundaries of engine and systems monitoring with the new MG3000 gauges. The MG3000 is a digital gauge with the ease of use of an analog-style instrument and the advanced engine control unit (ECU) monitoring capabilities demanded by today's leading engine manufacturers. The MG3000 instrumentation communicates directly with the J-1939 protocol used by the engine ECU, providing an important link between the operator and the engine ECU. With just a push of a button the operator can tell the status of the health of the engine including diagnostic messages, fault alerts and parameter information. Stand-alone or linked into a cluster, Faria's MG3000 and J-1939 gauges provide the best solution for engine monitoring in a cost-effective package.

Faria is one of only a few companies that have received the Automated Best Value Model Gold supplier award for on-time delivery and quality for seven consecutive years. Of course, innovation, quality and customer satisfaction have always been Faria's primary focus.

Today, Faria has made the transition from an electric and mechanical gauge manufacturer to a vertically integrated electronic hardware and software design company with in-house pick-and-place surface mount technology circuitry, winding, molding, stamping and dial-printing equipment.

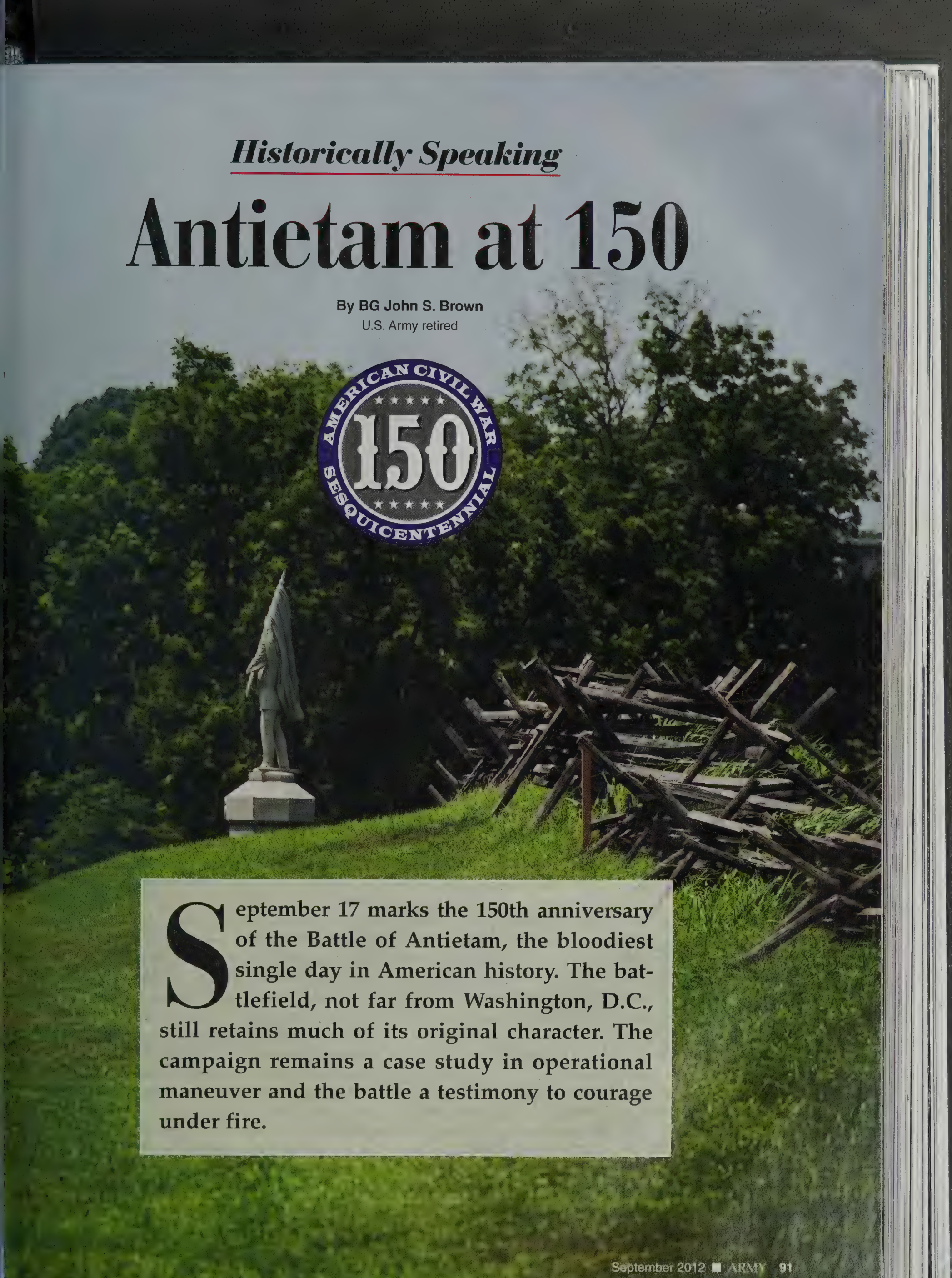
Faria produces some of the most sophisticated vehicle information and instrumentation systems in the industry. Its range of products are rugged enough to survive on military Humvees and heavy construction equipment, while also offering innovative styling for luxury boats and recreational vehicles. Thomas G. Faria Corporation is one of the few "made in the USA" manufacturers with the right products to meet future global needs for rugged, reliable and innovative instrumentation.

Photographs by Dennis Steel

Historically Speaking

Antietam at 150

By BG John S. Brown
U.S. Army retired



September 17 marks the 150th anniversary of the Battle of Antietam, the bloodiest single day in American history. The battlefield, not far from Washington, D.C., still retains much of its original character. The campaign remains a case study in operational maneuver and the battle a testimony to courage under fire.

The Lower Bridge spans Antietam Creek on Antietam National Battlefield, Md. Today it is referred to as Burnside's Bridge for MG Ambrose E. Burnside, whose corps finally advanced across it after being blocked by about 500 Confederates for three hours during the Battle of Antietam. Two major attacks were repulsed, but the Federals succeeded with a third attack.

In the July issue we discussed Union GEN George B. McClellan's Peninsular Campaign and its inglorious end. Learning that McClellan was withdrawing his army by sea from the peninsula, Confederate GEN Robert E. Lee broke away and hastened to defeat Union forces in northern Virginia before McClellan could rejoin them. These were commanded by MG John Pope, a capable general but no match for Lee and his brilliant principal subordinates, Thomas J. (Stonewall) Jackson and James Longstreet. In a se ries of masterful maneuvers, the Confederate general turned Pope's flank, forced him into a battle to recover hi lines of communications and handed him a stinging defeat a the Second Battle of Bull Run (Second Manassas).

Union forces fell back on Washington, D.C., where the were absorbed into a larger whole that included McClellan' returning Peninsular veterans. Pope was exiled to St. Pau Minn., there to take command of the Northwest Departmen McClellan assumed command of the combined forces an did a commendable job of reorganizing, retraining and rein vigorating them. McClellan was at his best when not on th field of battle. President Abraham Lincoln had appointe Henry W. Halleck as his General in Chief in July 1862, bu Halleck assumed a role as military advisor to the Presider rather than attempt the direct exercise of field or strategi command.

***BG John S. Brown**, USA Ret., was chief of military history at the U.S. Army Center of Military History from December 1998 to October 2005. He commanded the 2nd Battalion, 66th Armor, in Iraq and Kuwait during the Gulf War and returned to Kuwait as commander of the 2nd Brigade, 1st Cavalry Division, in 1995. He has a doctorate in history from Indiana University. His book,* Kevlar Legions: The Transformation of the U.S. Army, 1989–2005, *was published in 2011.*

current view of Dunker Church shows the National Park Service sign with a photograph casualties on the same ground. The church was the objective for attacks on the morning the battle by Union corps under MG Joseph Hooker and MG Joseph K.F. Mansfield.

The memorial to the Union's Irish Brigade honors soldiers who fell in the battle of Bloody Lane.

s capable as McClellan's reconstruction of the Army of the Potomac was, Union mobilization practices embodied a flaw that would continue to haunt commanders on the battlefield. Rather than placing a priority on ringing veteran regiments back up to full strength after ombat losses, the Union favored raising entirely new nits. Among the perceived advantages, this practice reuced the burdens of administering existing units at a disnce—and offered additional command positions with onsequent opportunities for patronage. During this pebd only 50,000 recruits replaced combat losses, whereas 0,000 went into totally new units. As a result, regiments ith combat experience withered, and regiments without ombat experience continued to be thrown into battle unerprepared.

Lee knew he could not rest on his laurels after Second Bull un, nor was he inclined to. On September 4 he invaded aryland, both to retain the initiative and in the hope that arylanders could be induced to join the Confederacy. aryland was a slave-holding state, and sentiment for the outh there was strong. The invasion offered opportunities sever vital Union east-west rail communications, seize the itical depot of Harpers Ferry, W. Va., move the fighting vay from Virginia, and operate against such major northern ties as Baltimore, Philadelphia, and Washington, D.C. Lee's spirations were Union nightmares. McClellan alleged he d "not despair of saving the capital" but nevertheless condered it prudent to ship the "family silver" elsewhere.

On September 13 McClellan was handed a copy of Lee's pecial Order No. 191. One of his soldiers had found it in an andoned Confederate campsite and recognized its impornce. This intelligence coup revealed that the Confederates ould be strung out from Harpers Ferry—where Jackson as besieging a garrison of 12,000—to Hagerstown, Md., id beyond. Little blocked McClellan's approach from ashington through Fredericksburg, Va., to cut across this line of communications. McClellan acted on this intelligence windfall, but the next day rather than immediately.

Lee, meanwhile, recognizing that critical intelligence had been compromised, speedily threw blocking forces into Turner's Gap and Crampton's Gap in Maryland while withdrawing the rest of his army in the direction of Sharpsburg on the Potomac River. Enterprising Union corps commanders forced both gaps, but they lost a day doing it. McClellan proceeded cautiously, convinced he was outnumbered even though he had an overall numerical advantage of 84,000 to 55,000. Harpers Ferry, surrounded and bombarded on all sides from neighboring heights, surrendered during the morning of September 15. This freed Jackson's considerable besieging force to rejoin Lee.

Lee took up a position at Sharpsburg facing east across Antietam Creek. Vegetation and irregularities in the ground offered cover, but his back was against the Potomac River, and the higher ground was on the Union side of Antietam Creek. McClellan's forces arrived on the afternoon of September 15. McClellan consumed the next day with skirmishing, reconnaissance and the formulation of plans. Jackson's force, meanwhile, marched from Harpers Ferry and assumed responsibility for the sector that would become the axis of the Union's main attack.

Early on September 17 two Union corps, commanded by MG Joseph Hooker and MG Joseph K. F. Mansfield, smashed into the Confederate left flank. They forced their way forward in heavy fighting but were checked by savage counterattacks and enfilading artillery fire. Mansfield was killed and Hooker wounded. Subordinate commanders tried to regain the momentum of the attack but became disorganized. The divisions of MG Edwin V. Sumner's II Corps marched in to reinforce the attack but became separated and misdirected during their approach. They deployed piecemeal in different places. The first to arrive was so badly mauled it was almost immediately combat-ineffective. The remaining two divi-

Association of the United States Army's

USA Pavilion

at DSEI 2013

10-13 September 2013

London, England

For exhibit space sales, contact
Amy Frankenstein at 703/841-4300 x 2413
or intlprogram@ausa.org.

www.ausa.org

U.S. Commercial Service
United States of America
Department of Commerce

DSEI
ExCeL London www.dsei.co.uk

Above, a memorial overlooking Dunker Church honors Maryland soldiers who fought in the Battle of Antietam. Inset left, a bronze memorial of stacked rifles supporting a cooking pot honors the 90th Pennsylvania Regiment at Antietam.

ons became embroiled in savage fighting for a sunken road beled Bloody Lane ever since. Repeated Union attacks ventually forced the Confederates out of Bloody Lane. Confederate forces deployed north of Sharpsburg were now on heir last legs, and a fresh Union corps was arriving. At this oint McClellan, appalled by his losses and magnifying Confederate strength in his own mind, demurred from further ttacks on this axis.

McClellan's hopes for victory shifted to the Confederate right flank, against which MG Ambrose E. Burnside was to launch massive attacks. Twice Union columns ere bloodily repulsed in assaults across the span thencefor-ard called Burnside's Bridge. On the third attempt they ade it across. At about the same time, other Union columns ossed Antietam Creek at fords located nearby. By 3:00 P.M. urnside was across the creek, and by 4:00 P.M. he was on the gh ground east and south of Sharpsburg. Around this time onfederate MG A.P. Hill arrived on the battlefield with the st of the Confederate divisions from Harpers Ferry. Literly panting from their forced march, these unexpected reinrcements crashed into the Union flank and forced it back to ntietam Creek. Both sides had had enough.

Lee held his positions throughout the day of September 3, and McClellan declined to attack them. Securing this oral victory, Lee skillfully withdrew across the Potomac at night. Outnumbered by almost two-to-one on the battleld, Lee had fought to a draw, losing about 10,300 to approximately 12,400 on the Union side. To this butcher's bill, one might add the capture of Harpers Ferry and its garrison. Union troops had fought well, as had most of their commanders. McClellan himself had been cautious and indecisive, committing his forces piecemeal. Lee had been able to shift forces sufficiently to contain each attack in turn. Lee withdrew undefeated and was virtually untouched by pursuit. President Lincoln was, however, able to portray the indecisive carnage as enough of a victory to justify unveiling his Emancipation Proclamation. For the Union cause, this was a victory of a very different sort. ★

Recommended Reading:

Esposito, Vincent J., *The West Point Atlas of American Wars, Volume I: 1689–1900* (New York: Frederick A. Praeger, 1959)

Foote, Shelby, *The Civil War, A Narrative, Vol. 1: Fort Sumter to Perryville* (New York: Random House, 1958)

Luvaas, Jay and Harold W. Nelson, eds., *Guide to the Battle of Antietam* (Lawrence, Kan.: University Press of Kansas, 1996)

McPherson, James M., *Battle Cry of Freedom: The Civil War Era* (New York: Oxford University Press, 1988)

Sears, Stephen W., *Landscape Turned Red: The Battle of Antietam* (Norwalk, Conn.: Easton Press, 1988)

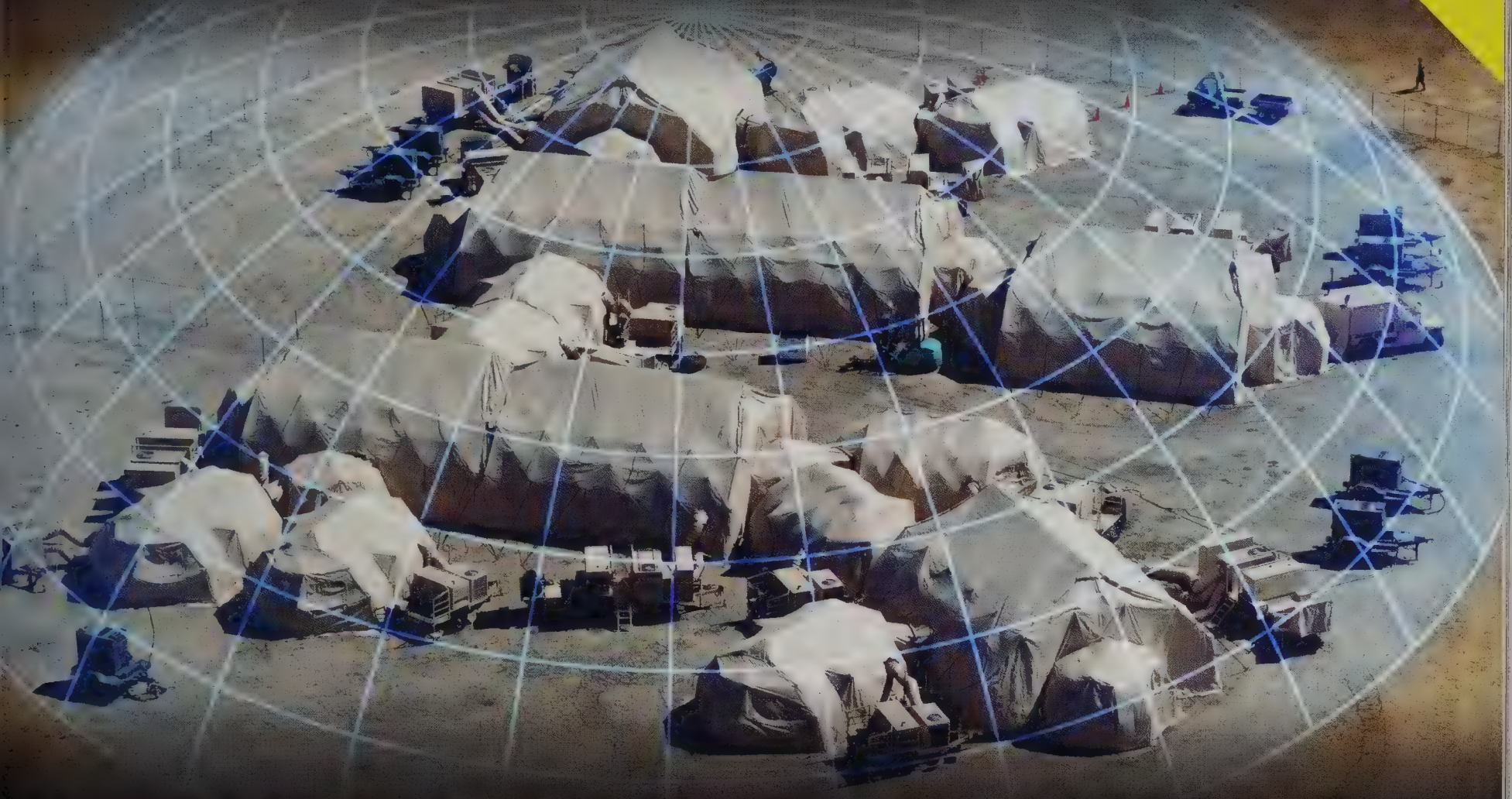
Never Forget

Top, a week after the 9/11 attack, Ground Zero remains a war zone, littered with debris from the attack on the World Trade Center in New York City. Above, night-lights illuminate smoke rising from the Pentagon after the attack, and beyond it the dome of the U.S. Capitol.

DRASH®

THE WARFIGHTER'S CHOICE

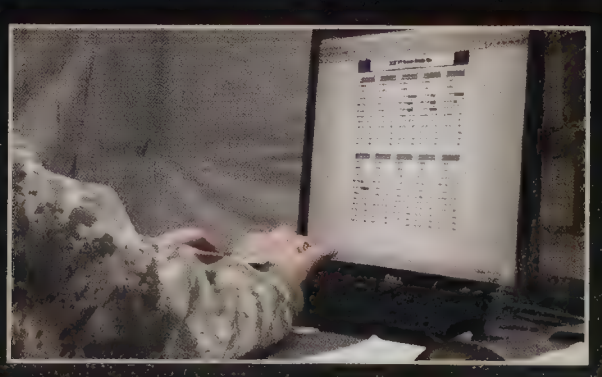
VISIT US AT
BOOTH 261
AT AUSA



INTELLIGENT POWER TECHNOLOGY®

REDUCE FUEL CONSUMPTION AND STREAMLINE POWER MANAGEMENT WITH A SINGLE NETWORKED POWER MICROGRID

DRASH Intelligent Power Technology® (IPT) is an advanced smart system enabling users to connect several digital trailer-mounted generators together to form a networked power microgrid. Once activated, each generator is automated to turn "on" and "off" based on real-time power demands and can be remotely monitored from inside your TOC refocusing more soldiers on the true mission. Not only does DRASH Intelligent Power Technology® offer exceptional fuel savings, it reduces wear and tear and works everywhere you do. To learn more about how DRASH Intelligent Power Technology® delivers more sustainable power for your needs, contact one of our representatives.

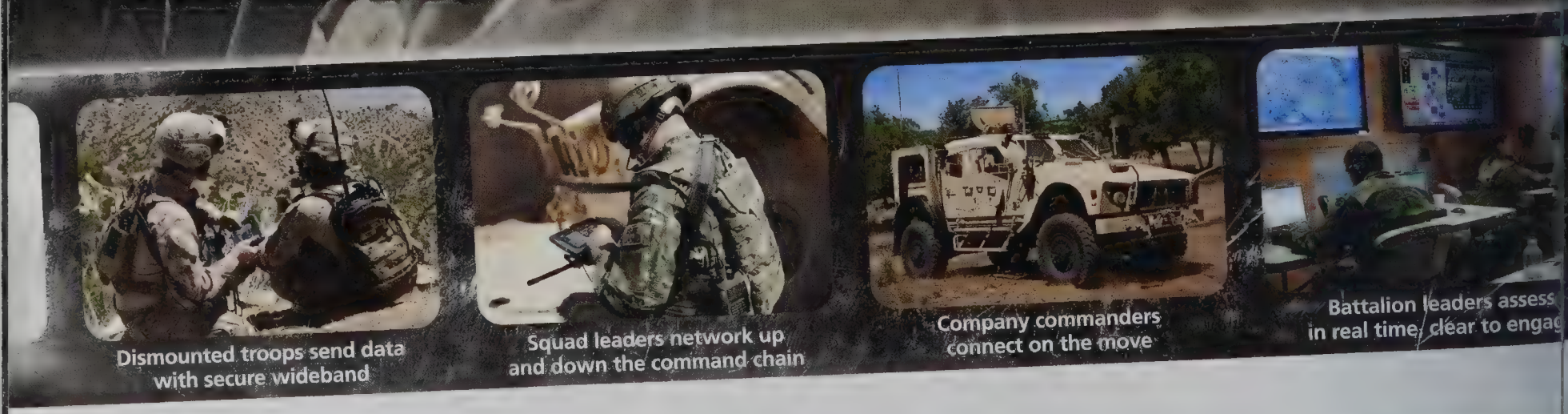


DHS SYSTEMS LLC
A DHS TECHNOLOGIES COMPANY

1-877-GO-DRASH drash@drash.com www.drash.com/ipt

Delivering the network.

The Harris AN/PRC-117G, now with SRW, for mobile command and control.



The Harris AN/PRC-117G gives today's commanders secure wideband access to critical information while on the move. Learn how Harris delivers the network at www.Harris.com/Delivers

harris.com

HARRIS
assuredcommunication

Education Periodicals
355.05 UNC
v. 62, no. 10 (2012)
PERIODICAL
A

The Magazine of the Association of the United States Army

ARMY

October 2012

www.ausa.org

2012-13 GREEN BOOK

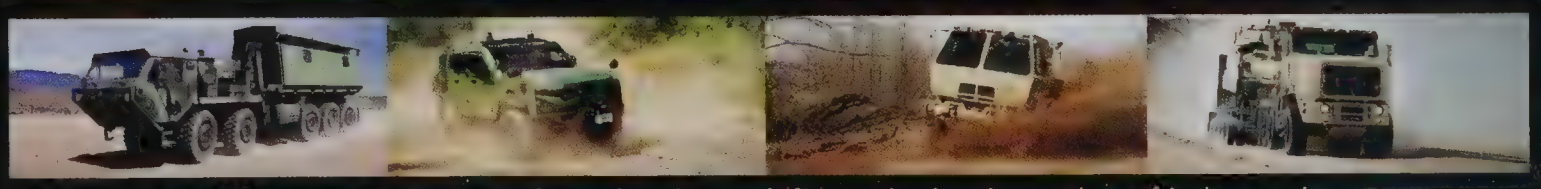
Supporting today's missions. And, building for tomorrow's.

The OSHKOSH® JLTV Solution.

At Oshkosh, we have an unwavering commitment to the men and women whose lives rely on our vehicles. Our JLTV solution is no exception.

The Oshkosh® Light Combat Tactical All-Terrain Vehicle (L-ATV) is tested, proven and ready to bring new capabilities to future missions. With an advanced crew protection system, the Oshkosh L-ATV provides MRAP-level protection and the ability to adapt as operating environments change. Its lightweight design and TAK-4*i*™ intelligent independent suspension system* deliver unprecedented off-road mobility, maneuverability and speed.

Building for tomorrow's missions. The Oshkosh L-ATV.



For more than 90 years, Oshkosh Defense has been defining the leading edge of light, medium, MRAP and heavy tactical vehicles.

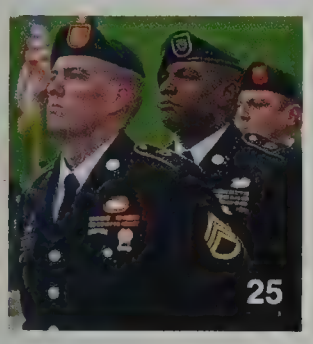
oshkoshdefense.com/jltv

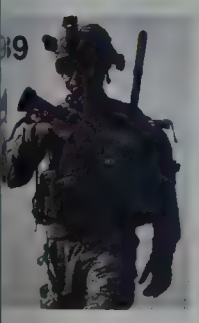
OSHKOSH DEFENSE

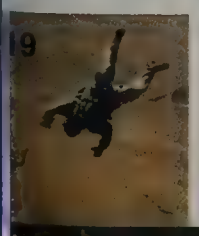
*Patent pending

©2012 OSHKOSH CORPORATION. Oshkosh and the Oshkosh logo are registered trademarks and TAK-4*i* is a trademark of Oshkosh Corporation, Oshkosh, WI, USA

JLTV_001_2012-US-1







ARMY MAGAZINE

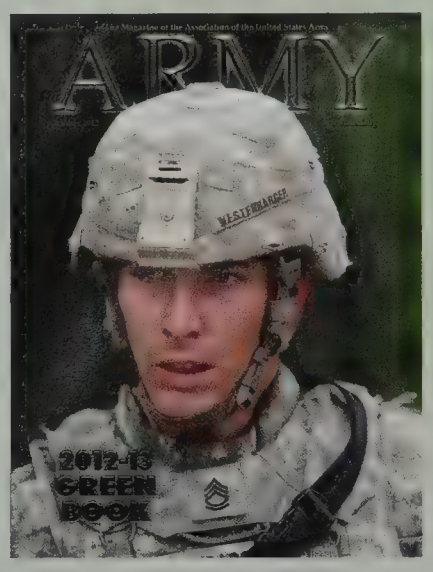
Published by the Association of the U.S. Army

VOL. 62, NO. 10 October 2012

2012–2013 STATUS REPORTS

9 President, Association of the U.S. Army
15 Secretary of the Army
25 Chief of Staff, U.S. Army
35 Sergeant Major of the Army
45 Assistant Secretary of the Army (Manpower & Reserve Affairs)
51 Acting Assistant Secretary of the Army (Acquisition, Logistics & Technology)
59 Assistant Secretary of the Army (Installations, Energy & Environment)
67 Assistant Secretary of the Army (Financial Management & Comptroller)
71 Assistant Secretary of the Army (Civil Works)
75 Commanding General, U.S. Army Forces Command
81 Commanding General, U.S. Army Training and Doctrine Command
89 Commanding General, U.S. Army Materiel Command
95 Commander, U.N. Command, Combined Forces Command & U.S. Forces Korea
101 Commander, International Security Assistance Force Joint Command/ Deputy Commander, U.S. Forces-Afghanistan
107 Commander, Combined Security Transition Command-Afghanistan/ Commander, NATO Training Mission-Afghanistan
113 Commanding General, U.S. Army Europe & Seventh Army
119 Director, Army National Guard
125 Chief, Army Reserve & Commanding General, U.S. Army Reserve Command
131 Commanding General, U.S. Army Pacific
137 Commander, U.S. Army Medical Command & Surgeon General of the Army
143 Commanding General, U.S. Army Special Operations Command
149 Commanding General, U.S. Army Space & Missile Defense Command
155 Chief of Engineers & Commanding General, U.S. Army Corps of Engineers
161 Deputy Chief of Staff, G-1
165 Deputy Chief of Staff, G-2
171 Deputy Chief of Staff, G-3/5/7
177 Deputy Chief of Staff, G-4
185 Chief Information Officer, G-6
193 Deputy Chief of Staff, G-8
199 Assistant Chief of Staff for Installation Management & Commanding General, Installation Management Command
205 Commanding General, U.S. Army Cyber Command
209 Commanding General, First Army
217 Commanding General, Third Army/U.S. Army Central
223 Commanding General, U.S. Army North (Fifth Army)
227 Commanding General, Eighth Army
233 Commanding General, U.S. Army South
239 Commanding General, U.S. Army Africa
243 Commanding General, U.S. Army Military District of Washington & Commander, Joint Force Headquarters-National Capital Region
247 Cochairmen, Army Chief of Staff's Retiree Council
253 ARMY WINNERS
263 COMMAND AND STAFF DIRECTORY
291 MAPS
301 ARMY POSTS AND INSTALLATIONS
311 ARMY WEAPONS AND EQUIPMENT
375 Advertisers in This Issue

This Month's Cover



Resharpening the Army's edge: SFC Marc Westenbarger, 4th Brigade Combat Team, 1st Armored Division, appears on the cover of this *Green Book*, photographed as he participated in the Best Tanker Competition at Fort Benning, Ga.

This year marked the inaugural competition to select the Army's best tank crew and highlighted the completion of the U.S. Army Armor Center and School's relocation to Fort Benning, joining the U.S. Army Infantry Center and School to form the Maneuver Center of Excellence.

The Best Tanker Competition, which will be held annually, is named the Sullivan Cup in honor of former Chief of Staff of the U.S. Army and current President of AUSA GEN Gordon R. Sullivan, U.S. Army retired.

Abrams tank crews representing armor brigades throughout the Army competed for the honor. The event's underlying objective, however, was to help refocus the Armor Corps on the importance of fundamental crew skills, especially tank gunnery, as the Army shifts training from a focus on developing the skill sets necessary to fight the wars in Iraq and Afghanistan to generating the broad set of skills necessary for the future.

Retained will be the lessons honed by more than a decade of counterinsurgency-focused warfare, but layered with maintaining those capabilities will be increased training to sharpen conventional maneuver warfare skills and expanded experiences that will prepare soldiers for challenges of the future—anything from humanitarian assistance to force-on-force conflict.

Added will be an emphasis on conducting multinational training and increasing multinational interoperation capabilities as the Army expands strategic responsibilities under the long-range strategic guidance issued earlier this year.

Army Chief of Staff GEN Raymond T. Odierno directed an overall study of the Army's force structure that takes into account the strategic guidance, pending budget and force reductions, and other factors that could require reshaping the Army to meet the demands of the future and create the Army of 2020.

As the Army's personnel numbers are reduced over the next few years and possible realignments take place, changes will require more of the individual soldier—both in the active and reserve components. Soldiers will need to take on greater responsibilities, and they must be trained to take on those responsibilities.

Soldiers who will shape the Army of 2020 will need a wide set of abilities and experiences, and the Army has already started preparing them. While preparing to make changes for the future, the Army remains focused on supporting soldiers who are still fighting in Afghanistan. Soldiers from the U.S. Army continue to be engaged in combat operations daily in Afghanistan, and they will continue to be trained, equipped and supported for successful completion of that mission.

Soldiers and their families continue to make sacrifices in the conduct of the war in Afghanistan. Recognition of those continuing sacrifices has diminished within the general public, but it will not wane within the U.S. Army.

(Cover photograph by Dennis Steele)

The editors wish to thank the public affairs officers of the Army's commands for their contributions and the Office of the Chief of Public Affairs, Department of the Army, for its contributions and coordination activities. Our special thanks go to Army Chief of Public Affairs BG Gary J. Volesky, James W. Hill and LTC Thomas J. Smedley for their assistance.

Unless otherwise indicated, all photographs in the *Green Book* are courtesy of the U.S. Army.

GEN Gordon R. Sullivan, USA Ret.
President, AUS

LTG Theodore G. Stroup Jr., USA Ret.
Vice President, Education, AUS

Mary Blake French — *Editor in Chi*
Larry Moffi — *Managing Edito*
Joseph L. Broderick — *Art Directo*
Dennis Steele — *Senior Staff Writ*
Toni Eugene — *Associate Edito*
Christopher Wright — *Production Arti*
Jeremy Dow — *Assistant Edito*
Katharine Scott — *Assistant Edito*
Thomas B. Spincic — *Editorial Assistan*

Contributing Editors

GEN Frederick J. Kroesen, USA Ret
LTG James M. Dubik, USA Ret.; an
Scott R. Gourley

LTG Thomas G. Rhame, USA Ret.
Vice President, Finance an
Administration, AUS

James E. Burke — *Advertising Manag*
Meagan B. Bailey
Advertising Production Manag

Norman Campbell — *Fulfillment Direct*
Valerie Holman — *Fulfillment Manag*

ARMY is a professional journal devoted to the advancement of the military arts and sciences and representing the interests of the U.S. Army. Copyright©2012, by the Association of the United States Army. ☐ **ARTICLES** appearing in ARMY do not necessarily reflect the opinion of the officers or members of the Council of Trustees of AUSA, or its editors. Articles are expressions of personal opinion and should not be interpreted as reflecting the official opinion of the Department of Defense nor of any branch, command, installation or agency of the Department of Defense. The magazine assumes no responsibility for any unsolicited material. ☐ **ADVERTISING.** Neither ARMY, nor its publisher, the Association of the United States Army, makes any representations, warranties or endorsements as to the truth and accuracy of the advertisements appearing herein and no such representations, warranties or endorsements should be implied or inferred from the appearance of the advertisements in the publication. The advertisers are solely responsible for the contents of such advertisements. ☐ **RATES.** Individual memberships and subscriptions payable in advance (one year/three year): $21/$63 for E1-E4 cadets/OCS and GS1-GS4; $26/$71 for E5-E7, GS5-GS7 $31/$85 for E8-E9, O1-O3, W1-W3, GS7-GS11 and veterans $34/$93 for O4-O6, W4-W5, GS12-GS15 and civilians $39/$107 for O7-O10, SES and ES; life membership, graduated rates to $525 based on age; $17 a year of all dues is allocated for a subscription to ARMY Magazine; single copies $3.00. For other rates, write Fulfillment Manager, Box 10156 Arlington, VA 22210-0860.

ADVERTISING. Information and rates available from the Advertising Production Manager or our advertising representatives, who are:

The Audit Bureau

James E. Burke and **Irene Lamar**, 230 Park Ave., Suite 1546, New York, NY 10169. (212) 697-2844. FAX (212) 682-1421. Email: advdpt@aol.com.

ARMY (ISSN 0004-2455), published monthly. Vol. 62, No. 1 Subscription $34 a year. Publication offices: Association of the United States Army, 2425 Wilson Blvd., Arlington, VA 22201-3326, (703) 841-4300, FAX: (703) 841-3505, email armymag@ausa.org. Visit AUSA's web page on the Internet at www.ausa.org. Periodicals postage paid at Arlington, VA and at additional mailing office.
POSTMASTER: Send address changes to ARMY Magazine Box 101560, Arlington, VA 22210-0860.

Carry Anywhere. Connect Everywhere.

The Harris RF-3590 Tablet—the only tablet built specifically for today's military operations. With just a touch, it lets you access a wideband network and share real-time information—when, where, and how you need to. Learn how this lightweight, ruggedized tablet can deliver critical information in support of your missions' success: **harris.com/tablet**

See it in action.

HARRIS®
assuredcommunications®

harris.com

LEAD ON –
WE'RE WITH YOU ALL THE WA
LYCOMING
AAI
OVERWATCH
TEXTRON Defense Systems
TEXTRON Marine & Land Systems

TEXTRON Systems

You are always focused on the mission at hand. That's why our focus is on you – providing reliable, affordable solutions that enable, empower and protect you.

Our Commando™ family of vehicles is built strong and proven tough against the most dangerous threats. Our Shadow® Tactical Unmanned Aircraft Systems are an ever-present beacon overhead. Our iCommand™ suite creates real-time synchronization between people, data and assets to the last tactical mile. Our intelligence and geospatial solutions give you situational awareness and actionable intelligence wherever you are. Our smart weapon systems deliver precision and protection when you need it most. Our test and training platforms are all around you, ensuring the mission readiness of critical equipment. And our skilled logisticians and field service teams are right there with you, delivering affordable, proven asset availability.

Wherever you go. Whatever the mission. Textron Systems has the people, the solutions and the drive to power your way forward.

STRATEGIC STUDIES & DEFENSE ANALYSIS™

THE DEGREE DESIGNED EXCLUSIVELY FOR SPECIAL OPS

Bachelor of Science in Strategic Studies and Defense Analysis–online from Norwich University

Taking the initiative comes naturally to you.

That's why your next challenge should be a bachelor's degree from Norwich University, the nation's oldest private military university.

Combine your unique training and experience with our online curriculum and you can graduate in less than two years.

Expect Challenge. Achieve Distinction.

Find out more today. Call 802-485-2458 or toll free at 866-NU-GRADS, or visit www.online.norwich.edu

NORWICH UNIVERSITY™
1819
Expect Challenge. Achieve Distinction.

Non-Discrimination Statement Norwich University, in compliance with Title IV of the Civil Rights Act of 1964, Title IX of the Education amendment of 1972, and Section 504 of the Rehabilitation Act of 1973, does not discriminate on the basis of race, religion, color, national origin, age, sex, or physical handicap in any of its policies, practices, and procedures. **Critical Information** www.norwich.edu/consumerdata

Nine master's degree programs also available online. Learn more at online.norwich.edu

STATUS REPORTS

THE 21ST CENTURY KIOWA WARRIOR
FOR THE 21ST CENTURY SCOUT

Building on unprecedented performance, the Bell OH-58 Block II is the definitive solution for the 21st Century Scout. Netting billions of dollars in taxpayer savings, the Block II solution allows both industry and the Army the resources needed to invest in future S&T projects like FVL. Flying high/hot at max gross weight, the Bell OH-58 Block II is the fastest-fielding, lowest-cost solution available. The Bell OH-58 Block II. American ingenuity for America's soldiers. *On a Mission.*

- 6k/95 Performance at Max Gross Weight
- 800,000+ Combat Flight Hours by the Kiowa Warrior
- Highest OPTEMPO and Readiness Rates by the Kiowa Warrior
- Fielded Level II MUM-O

Bell Helicopter
A Textron Company

Visit Us At AUSA, Booth #74

www.ScoutsOut.co

© 2012 Bell Helicopter Textron Inc.

1-800-FLY-BELL | bellhelicopter.com |

America's Army: On the Road to 2020

By GEN Gordon R. Sullivan
U.S. Army retired
AUSA President

As 2012 draws to a close, the 237-year-old U.S. Army is still at war. Although military operations in Iraq concluded successfully at the end of 2011, the Army continues to enable transition in Afghanistan and to target al Qaeda and its weakened leadership there and elsewhere. The United States and NATO are committed to our Afghan government partners, continuing to go into harm's way to help stand up Afghan military and police forces through the end of 2014, when NATO forces will turn over combat operations to their Afghan counterparts.

Even as these engagements continue, our Army has already entered a period of prolonged transition. Hybrid threats that incorporate regular and irregular

warfare, terrorism, and criminality continue to emerge. Joint forces today and tomorrow will face the destabilizing effects of global economic downturns, increased competition for strategic resources and new threats in cyberspace. The President has asked our Army to stand ready to fulfill a broader range of missions and to be more globally responsive to regional combatant commander requirements even as it remains engaged worldwide.

To endure as the trained and ready force that the nation demands, our Army needs to be properly resourced. AUSA remains at the forefront in not only telling the Army's story but also articulating what resources the Army needs to be ready to conduct decisive action when called. A trained and ready Army needs to be sufficiently staffed in all its uniformed components (650,000 soldiers on active duty at all times supported by 360,000 Army National Guard and 215,000 Army Reserve soldiers). It requires a 28 percent share of an overall defense budget no smaller than 5 percent of the nation's gross domestic product. This is an enduring principle that AUSA will continue to champion for our Army and our soldiers, and I am confident that the U.S. Army will remain ready—prepared to accomplish all missions—and will endure as America's force of decisive action.

We will win the current fight, provide necessary depth and versatility to the joint force, and develop the force of the future—including new capabilities in the global commons of space and cyberspace—to preserve dominant overmatch against any adversary. We will also take care of our people sustaining the unmatched quality of our force while providing the highest level of care and support to our wounded warriors. It is what the American people expect and what our freedom demands.

Chairman of the Joint Chiefs of Staff GEN Martin E. Dempsey recently described evolving global trends as a "security paradox," observing that even though greater levels of peace and security are evident worldwide, destructive capabilities are becoming available to a more disparate pool of adversaries. Reality demanded that the Army transform to meet new challenges both known and unforeseen in today's joint, interagency, intergovernmental and multinational environment. As operations continued in Afghanistan, the Horn of Africa and elsewhere in the Middle East, 2012 dawned with new strategic guidance for our armed forces.

The President and the Secretary of Defense directed a strategic pivot to the Asia-Pacific region, an area in which the United States has inestimable strategic and vital interests. The drawdown of American landpower in Iraq helped enable this shift to a region that was under-resourced for most of a decade but which will be of significant importance to the United States in coming decades. This strategic guidance preceded the submission of the fiscal year 2013 Department of Defense and Army budgets, ensuring that missions and resources were matched appropriately.

AUSA has been—and will continue—telling the Army's story in the Pacific Basin, a region where the presence of 66,000 American soldiers remains a critical ingredient in achieving our national objectives. There are nu

nerous missions identified in the strategic guidance for which our Army is prepared to act decisively in the Pacific. No missions are more important in this period of strategic uncertainty than those in which soldiers shape the strategic environment by building the capacity of partner nations via strong relationships. There is no replacement for the trust generated (or the commitment implied) by the presence of American soldiers in a region that is home to seven of the world's 10 largest armies. Combine this increased trust with Chief of Staff of the Army GEN Raymond T. Odierno's concept of regionally aligning Army forces to support the unique needs of each combatant commander—as well as systemic improvements in coordination among conventional and special operations forces—and it becomes abundantly clear that our Army (active, National Guard and Reserve) is an integral component of the joint force as it secures the nation's vital interests in the Pacific.

While strategic uncertainty grows, the nation's fiscal crisis does not appear to be letting up. America has asked its Defense Department to remain trained and ready while reducing total spending from recent wartime peaks. This means that all of the military services, and especially the Army, will see significant manpower reductions over the next five to seven years and will have to postpone planned modernization programs. A smaller Army will have to be more agile and flexible in an era when we have to make every soldier count.

It is absolutely critical that the Army's transition be carried out in a balanced and predictable manner. GEN Odierno has an achievable plan to draw down end strength gradually and at minimal strategic risk. The Army has also taken senior-level action to evaluate and prioritize its most necessary modernization and acquisition programs during an austere budget climate. Furthermore, the Army is constantly evaluating its training methods and using the lessons learned in more than 10 years of war to ensure that readiness is provided at best value. It is crucial that the Army has the ability to execute its transition without being threatened by sudden or untargeted cuts and that its three pillars of personnel, modernization and readiness be appropriately balanced. The unprecedented integration of the active Army, Army National Guard and Army Reserve over a decade of war is a strong foundation upon which the Army of 2020 will be built. Likewise, years of collaboration between the Army and U.S. special operations forces will continue to be a strength of the Army of 2020.

This year the Army continued its reexamination and revitalization of the Army profession and the profession of arms. After a decade of war and high operational tempo, now is the time to reflect upon what it means to be an Army professional. AUSA fully supports the U.S. Army Profession Campaign. Virtually all professions—medical, legal, educational, cultural and scientific—value the services of their professional societies. These organizations strengthen the understanding of the profession's role in society, promote continuing professional education, reinforce the identity of members with the tenets of their profession, and provide forums for exchanging ideas and concepts among peers (both inside and outside the profession). In this respect, the Army is no different. We have learned much about our capabilities, our ethics and the expectations of our people during more than a decade of continuous combat. We witness the values, the leadership and the selfless service of our professionals everywhere they serve. Our professional soldiers are the foundation around which we are building the Army of 2020.

As the Army's professional association, AUSA remains as important as ever, bridging the gap between military professionals and their unique client: the American people. AUSA will continue to provide professional development forums and research products to enhance contact among Army professionals, with the defense industrial base, with other gov-

ernmental and nongovernmental institutions and, of course, with the general public.

As GEN Odierno often says, however, just as the strength of our Army is our soldiers, so, too, the strength of our soldiers is our families. As we approach the end of the current fight while anticipating the next, I appreciate more than ever how important our Army families are to the well-being and readiness of the force. I am committed to providing support to Army families through AUSA's Family Programs directorate, now led by Patricia Barron. Patty, an Army spouse, joined AUSA this year with a wealth of experience in caring for the families of servicemembers. Under her leadership, AUSA will continue to support the Army Family Covenant through our chapters and our cadre of tireless volunteers.

Our all-volunteer soldiers remain the best-equipped, best-trained land force in history. Equipping this magnificent Army to meet the challenges of the 21st century must begin with a strong and vibrant partnership with the defense industry. Our Army of American sons and daughters needs the very best technology that industry can provide. For more than 60 years, AUSA has facilitated this vital relationship through Army/industry exhibits at our Annual Meetings in October and at periodic symposia and defense expositions throughout the year. Given today's budget environment, communication between the Army and its industrial partners has never been more important. AUSA will assist Army and business leaders to keep those vital channels open.

Over the past year, AUSA and other like-minded organizations have fought and won many legislative victories for the Army and our members, but there is much work left to be done. In particular, military compensation has been under heavy attack. In the current budget environment, it has been all too tempting for some to target the earned benefits paid today to those soldiers and families who made their sacrifices long ago. Thus far, AUSA has successfully held the line against massive proposed increases to TRICARE fees and proposed cuts and structural changes to the military retirement pay system. Our soldiers and families have already sacrificed far more than their fair share for the compensation they receive, so AUSA will keep fighting to preserve the full value of soldiers' earned benefits and deferred compensation.

I continue to be impressed by the dedication of our force as well as the enthusiasm and support that AUSA receives every year when we host our Annual Meeting. We expect to occupy the entire Walter E. Washington Convention Center beginning on October 22 with our key leader speakers, Institute of Land Warfare forums, family forums, Army/industry exhibits, the ever-popular congressional breakfast and much more. The Army Ten-Miler will kick off its 28th year as the premier 10-mile race in the United States. This year, more than 31,000 runners registered in only nine hours, shattering the record that we set last year.

For these reasons and more, there has never been a greater need for the unique role AUSA plays. Soldiers have been in harm's way for more than a decade and will remain there for the foreseeable future. Our country is struggling with the consequences of an economic downturn and as we move forward, the world is becoming more dangerous than ever before. We at the Association of the United States Army are committed to keeping our Army strong just as we have for the past 62 years: Voice for the Army, support for the soldier. ★

Winning the battle against night, bullets and mediocrity.

SCHOTT component technologies lead the way in armor, night vision, electronic packaging and optics.

Component failure is not an option. That's why SCHOTT fights the laws of physics every day to achieve the very highest levels of success. It's why the defense industry consistently chooses our components for critical equipment and systems. Our SCHOTT Resistan® transparent vehicle armor, currently deployed in Afghanistan, is lighter than competing armor. It provides multi-hit ballistic performance while still allowing soldiers to use night vision equipment – a key factor in their safety. We've expanded and enhanced our capabilities in fiber optics and lighting, IR and eye-safe laser materials and electronic packaging. Insist on components that are SCHOTT stronger, SCHOTT safer, SCHOTT smarter.

SCHOTT Defense
2451 Crystal Drive, Suite 450
Arlington, VA 22202
Phone: 703-418-1409
Fax: 703-418-4762
E-mail: defense@us.schott.com

www.us.schott.com/defense

SCHOTT
glass made of ideas

Enabling a safer world

For over 60 years, Cubic ground combat training systems have helped the armed forces of the United States and its allies learn how to shoot and maneuver in the combat environment. Our company has installed and delivered 80 percent of the ground combat training centers worldwide. We're the U.S. Army's No. 1 supplier of Multiple Integrated Laser Engagement Systems (MILES) and Engagement Skills Trainers (EST), and we're pioneering exciting new technologies for immersive training. Cubic also designs, innovates, manufactures and fields a wide array of technologies for tactical communications, supply chain logistics and national security. To learn more about this product and others, go to http://www.cubic.com/MILES-IWS.

CUBIC

www.cubic.com

Proud of Our Past, Confident in Our Future

By John M. McHugh
Secretary of the Army

This year, our nation celebrates a number of historic commemorations, a series of events that should serve to remind us of the vital role our Army has long played in preserving the liberties and freedoms of this great nation. One of those is the 200th anniversary of the War of 1812, which has become known as America's second war for independence, a conflict that finally ensured this nation's freedom, security and preeminence in the Western Hemisphere.

That victory became more than a military success; it also ushered in a period historians call the Era of Good Feelings, a time when national pride created a new sense of unity and purpose on our shores. There is no greater monument or memorial to that time in American history than the "Star-Spangled Banner," penned by Francis Scott Key as

A 13-year commemoration of the 50th anniversary of the Vietnam War began on Memorial Day, when the Armed Forces Color Guard presented the colors at the Vietnam Veterans Memorial in Washington, D.C.

he witnessed the U.S. Army and Fort McHenry's commander, MAJ George Armistead, lead a valiant and triumphant defense of Fort McHenry in Baltimore, Md.

This past Memorial Day, we also began marking the 50th Anniversary of the Vietnam War, a time President Obama recently described as "one of the most painful chapters in our history … most particularly," he noted, "how we treated our troops who served there."

When those hostilities ceased, there were no ticker tape parades or joyous public homecomings. At the time, America failed to properly say thank you for the service, valor and sacrifice of those who fought and died in Vietnam and Southeast Asia. We must never again repeat such a tragic oversight.

Today, as we commemorate anniversaries of long-ago conflicts, the U.S. Army is at work marking another milestone, one not yet measured in generations or round numbers—more than 11 years at war in Afghanistan.

Since our nation was first attacked on September 11, 2001, much has changed. Two of history's most infamous tyrants have been met with justice. We have rid the world of scores of nefarious terrorist leaders, along with thousands more who swore a singular allegiance to do harm to free people everywhere. Also in recent years, we ended the war in Iraq on our terms and are preparing for a successful drawdown in Afghanistan.

Leaving these two theaters provides us the opportunity to take the steps necessary to increase our operational capability and allow the Army and the nation to reset and refocus. Indeed, much of that effort has already begun—adjusting our end strength, properly resourcing our primary acquisition programs, and rebalancing our force posture to more effectively support our new national strategic focus on the Asia-Pacific region.

Since the Department of Defense first unveiled this effort, a number of pundits and critics have questioned what role, if any, the U.S. Army might play, simplistically purporting that such a strategy will depend solely on naval and air forces. Reality paints a far different picture.

The fact is, the Pacific is home to some of the largest land masses on earth. Indeed, seven of the world's 10 largest armies are located in this region, and 22 of its 27 nations currently have an army officer serving as their chief of defense. Today, contrary to the opinions of some, the U.S. Army already has a strong personnel presence in that theater.

John M. McHugh *was sworn in as the 21st Secretary of the Army on September 21, 2009. Previously, he was a member of Congress representing Northern and Central New York. He served as the ranking member of the House Armed Services Committee with responsibility to oversee the policies and programs for the Department of Defense and each of the armed forces. He also served as chairman of the Morale, Welfare and Recreation Panel and as chairman, later ranking member, of the House Armed Services Committee's Subcommittee on Military Personnel. He served as a senior member of the House Committee on Oversight and Government Reform, and for six years he was the chairman of the Subcommittee on the Postal Service. From 1997–2004, he was a member of the House International Relations Committee, and from 2005–09, he served on the House Permanent Select Committee on Intelligence. He was also a 14-year member of the U.S. Military Academy Board of Visitors. Before becoming Secretary of the Army, McHugh was cochair of the House Army Caucus, a bipartisan organization that works to educate fellow House of Representatives members and their staffs about Army issues and programs. He began his public service career in 1971 as an assistant to the city manager of Watertown, N.Y. In 1976, he joined the staff of New York state Senator H. Douglas Barclay. He earned an MPA from the State University of New York's Nelson A. Rockefeller Graduate School of Public Affairs in 1977. Succeeding Senator Barclay in 1984, McHugh served four terms in the legislature's upper house before his election to the U.S. House of Representatives in 1992.*

Secretary of the Army John M. McHugh conducts an official visit to the Mongolian Ministry of Defense in August. Secretary McHugh also observed U.S. servicemembers participating in Exercise Khaan Quest 12, a multinational exercise sponsored by U.S. Army Pacific and hosted annually by the Mongolian Armed Forces.

In August, I traveled to observe Khaan Quest 12, a military exercise conducted near Ulaanbaatar, Mongolia, where 1,000 soldiers from 10 countries—including the United States—participated in training and maneuvers to strengthen our military cooperation and enhance regional peacekeeping capabilities. I then visited Korea, where we continue to observe the 60th Anniversary of what has become known as the Forgotten War.

Nowhere on earth can we find a more stark example of how quickly conflict can occur and how important the Army's role in the Pacific has been, and continues to be, in securing regional stability. I'm reminded of the words of GEN Omar Bradley, who succinctly observed that "only one military organization can hold and gain ground in war—a ground army supported by tactical aviation with supply lines guarded by the navy." Bradley's words are as true today as ever. America's Army has long been a force for good, wherever the call has sounded. Our new national strategic posture not only recognizes, but embraces, this reality.

With confidence in our new way forward, we must also maintain a rigid focus on our ongoing mission in Afghanistan. Nothing is more important than continuing to provide our warfighters the resources necessary to complete the military mission successfully and return our soldiers home safely.

At the same time, we are called upon to come to terms with a new reality here at home: smaller, leaner budgets and a smaller, more agile Army. Since the attacks of 2001, the Army has benefitted from a well-resourced force and a government able and willing to fund our every requirement. With a shaky global economy, however, and the total drawdown of combat forces first in Iraq, and soon in Afghanistan, we simply must take the steps necessary to reduce costs and wisely curtail spending.

For the Army, that will present a particular challenge. Unlike our sister services, we generally lack "big ticket" items: aircraft carriers or next-generation fighter planes. Simply put, our greatest asset, and our largest expense, has always been our people.

And people will, inescapably, feel the impact of our declining budgets.

U.S. Marine Corps/Sgt. Brian Kester

A soldier exits a UH-60 Black Hawk helicopter in the village of Darrah-i-Bum in western Afghanistan's Badghis Province in January 2011. He was part of a cadre accompanying NATO's International Security Assistance Force Command Sergeant Major on a visit to servicemembers operating in the area.

Indeed, as we build the Army of 2020, we are presently scheduled to decrease our active Army end strength from a recently authorized peak of about 570,000 to approximately 490,000 over the next five years.

For all their difficulties, the challenges that lie ahead are hardly new. Throughout history, and throughout our Army's history, prolonged eras of conflict most often led to prolonged periods of declining military resources.

Writing between World Wars I and II, Charles de Gaulle noted in the classic French military essay, "The Edge of the Sword," that there is most always "friction between soldiers and statesmen, since the latter are forever trying to find ways of saving money, while the former are constantly urging increased expenditure." The French leader noted, too, that "it does, of course, occasionally happen that a lesson recently learned, or an immediate threat, compels them to agree."

Most experts do agree we must become better stewards of increasingly scarce taxpayer dollars.

The opportunity we have at this moment in time is to break with the historic trends whereby budget cuts led to diminished military might. The fact is, unlike in years past, we've been given a real chance to "get it right."

As we embark upon our new way forward we must, above all else, do those things necessary to acknowledge the people who sacrificed so much to build the greatest land force the world has ever known. We need to keep them engaged and, most of all, *in* the Army. Properly training, developing and utilizing soldiers and civilians in the future will be critical to ensuring our nation's continued security and our Army's future success.

In such challenging times, we must make every effort to keep others from determining our fate. In that regard, we will have to exercise the leadership and initiative necessary not only to get smaller but also to become smarter and better. Our success can be realized only if we confront this new era directly and act decisively to cast our own fate and future. In short, we must muster the determination and imagination required to meet the nation's needs within emerging budget constraints.

For example, we continue my ongoing initiative to fundamentally restructure the institutional Army, the so-called Generating Force. As I've written previously, finding new ways to provide services, equipment, training and support to soldiers, civilians and their family members will serve to cut costs while also improving delivery.

Through that initiative, we've already realized significant progress in such areas as contracting and acquisition, better ensuring that soldiers get what they need when they need it, while securing best value for taxpayers. This is the type of effort that we will need to expand in the days ahead.

Undeniably, a number of tomorrow's most important and vexing challenges will be neither budgetary nor strategic; rather, they will be human. More than a decade of war has inflicted a heavy toll on our soldiers and their families. Some of those effects are tragically visible, battlefield injuries of every description. On the other hand, some cannot be so readily seen: traumatic brain injury, post-traumatic stress and the other invisible wounds that war so indiscriminately imparts.

We are working every day to meet and overcome these challenges through constant medical innovation and groundbreaking treatment and research. We are committed to improving the health of the entire force through training, treatment and care, and we are fostering an environment in which soldiers know that it's okay to ask for help, and their buddies know to get involved and lend a hand.

To truly keep our soldiers healthy and well-cared-for, however, we have to do even more to keep them safe, whether at home or deployed, whether from themselves or someone else. That means taking on tough problems such as suicide and sexual assault.

These are especially heart-wrenching issues, anathema to our Army values and the Warrior Ethos. Each day, Army leaders are working diligently to address these critical issues with new programs, better ideas and continuous resolve, but every soldier, every civilian, and every member

MAJ Sylvia Lopez and SFC John Battista were awarded Army Commendation Medals during a ribbon-cutting ceremony for the Guard Resilience University, a training school at the Wisconsin Army National Guard's 426th Regional Training Institute at Fort McCoy, Wis.

INTELLIGENCE IN REAL-TIME TO THE FRONT LINE.

The U.S. Army's Enhanced Medium Altitude Reconnaissance and Surveillance System (EMARSS) will provide combat units in austere locations with direct, actionable, near real-time intelligence. Selected by the Army, the Boeing EMARSS solution brings together a new-generation platform and the most advanced, modular ISR systems to accommodate a broad range of missions—unmatched capability to help ensure ground units every possible advantage.

BOEING

Soldiers assigned to the 1st Armored Division wait to hear President Obama discuss the future of the Army and the United States during a speech at Fort Bliss, Texas, in late August.

of the Army family has a responsibility to do their part as well. In short, only a service-wide effort will ensure the Army reduces and ultimately eliminates these crucial challenges and, by so doing, help heal all our soldiers' wounds.

These are perplexing times, but despite the complexities of our problems we must, as much as any other measure, return to basics. Secretary Panetta's choice of Fort Bragg, N.C., earlier this year to express his concern over what he sees as a breakdown in discipline and standards across the nation's military should serve as a reminder to all of us that we must strive every day to be better, to become an example not of what is broken, but of what works.

As isolated as these incidents may be, however, they show, as Secretary Panetta noted, "a lack of judgment, a lack of professionalism, and a lack of leadership" that pu "servicemembers at risk ... hurt morale ... and ... damage our standing in the world." Our enemies seek every advantage against us, and it takes only seconds for one picture to become an international headline.

Good order and discipline do more than save us from bad headlines; they take a weapon away from this nation's foes. For all its importance, this is not solely a matter of our standing in the world; it is a question of our posture here at home as well.

A division commander once told me his biggest fear for his soldiers' safety wasn't when he sent them outside the wire in Afghanistan. Rather, it was those times he issued them a weekend pass while back home. The stress and strain of more than a decade at war—repeated deployments and extended time away from family, friends and support—affect different people in different ways. Each soldier, civilian and family member needs to be aware and engaged and offer compassion to those seeking help, counsel for those who need guidance and intervention for those who have lost their way.

The uniform our soldiers wear represents much more than the U.S. Army. It represents our core values: selflessness, respect, discipline and good judgment. In short, it represents our nation and all its high ideals. It is the uniform worn valorously in the battle of New Orleans, at Inchon and on Pork Chop Hill, in Da Nang and Khe Sanh, in Kandahar, Kabul and Mazar-e-Sharif, in conflicts near and far large and small, throughout the Army's 237 years.

This year, every year, our Army celebrates a proud and glorious past. Its soldier, its strength—the strength of our nation—will ensure an even brighter, safer and more hopeful future for all Americans and those citizens everywhere who share our dreams and hope for a better, more peaceful world. ★

DoD/SMSgt. David H. Lipp

SFC Jon Benedict, 188th Engineer Company (Vertical), North Dakota Army National Guard, greets his daughters after landing in Fargo in August. During a yearlong deployment, about 160 of the soldiers completed more than 150 construction projects in Kuwait and helped with the drawdown from Iraq.

FUNCTIONALITY. DEPENDABILITY. VERSATILITY.

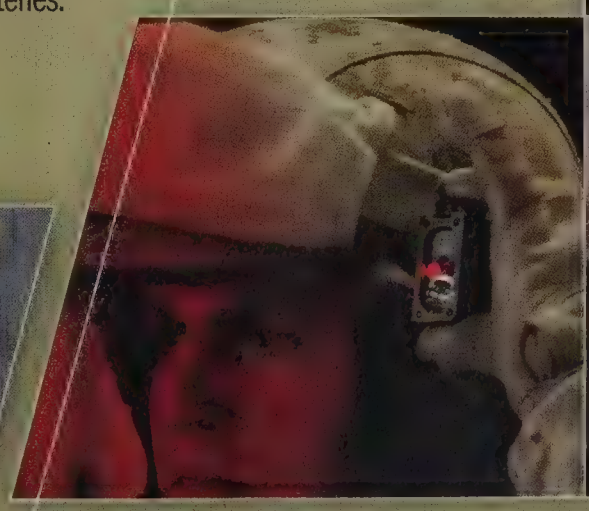
SIDEWINDER COMPACT® II

NSN# 6230-01-603-7205

Of all the variables you contend with in battle, the performance of your field light shouldn't be among them. That's why we made the Sidewinder Compact II® incredibly intuitive and easy to use. Featuring a red, white, blue and IR LED, and four intensities for each, plus a strobe function, the Sidewinder Compact II is like 20 flashlights in one. With a 185˚ articulating head, you can clip it onto your gear, a headstrap or mount it on your helmet to ensure you illuminate what you need to see. Plus you get the flexibility of multiple power source options with the Sidewinder Compact® II. Use either Alkaline "AA", Lithium "AA" or Lithium CR123 batteries.
The Sidewinder Compact II – the light heroes trust.

MULTI-TASK LIGHTING

RED, WHITE C4,
BLUE AND IR LED
CLIPS ANYWHERE
SIGNALING
TASK LIGHTING



VERSATILE POWER SUPPLY

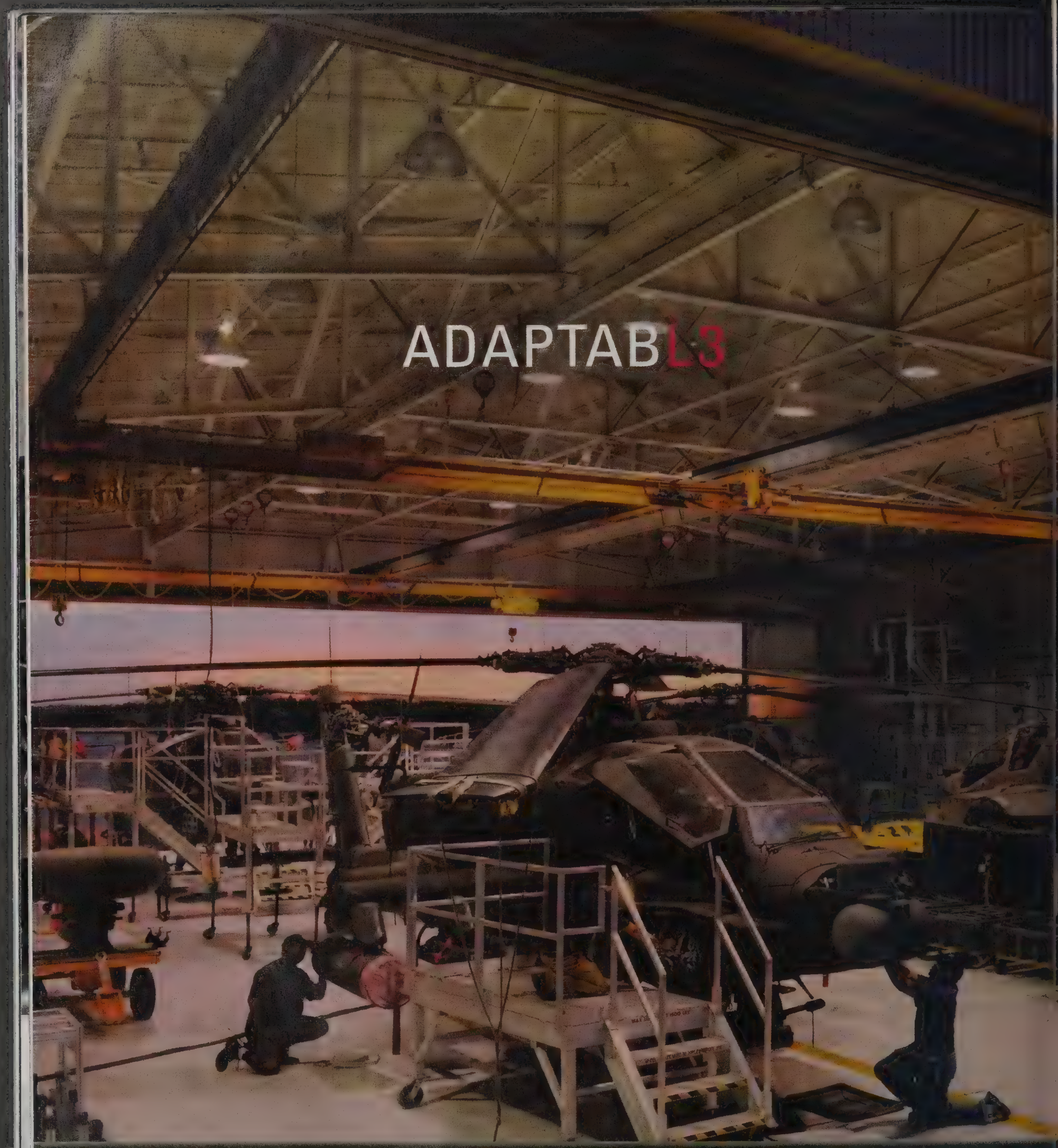
The **SIDEWINDER COMPACT II** can use 3 types of battery power:

ALKALINE "AA"
LITHIUM "AA"
LITHIUM CR123 BATTERIES

STREAMLIGHT®
Heroes Trust Streamlight®

30 EAGLEVILLE ROAD, EAGLEVILLE, PA 19403 | 800.523.7488

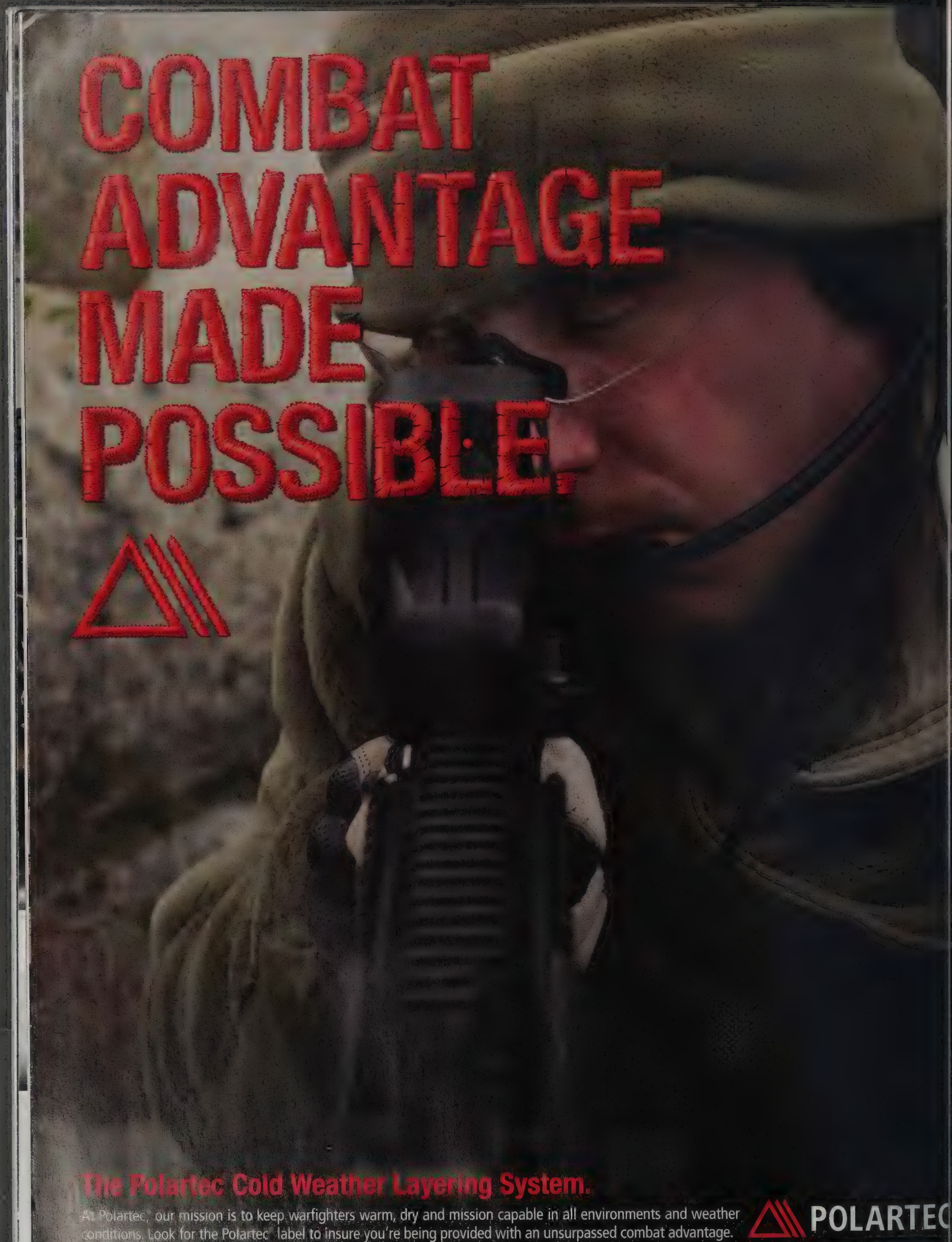
CONNECT WITH US WWW.STREAMLIGHT.COM


ADAPTABL3

Updating, upgrading and resetting existing assets is as much about people as products — and L-3's engineering and integration expertise is unparalleled. We're structured to work in teams, close to and with the customer, allowing us to identify and analyze more problems on-site and configure effective, economical solutions in less time. After all, if your fleet isn't operating at peak performance, it affects your mission readiness. We're prepared for any and all challenges, starting with yours.

Adaptable — It's how we work.

L-3com.com


COMBAT
ADVANTAGE
MADE
POSSIBLE.
The Polartec Cold Weather Layering System.
At Polartec, our mission is to keep warfighters warm, dry and mission capable in all environments and weather conditions. Look for the Polartec label to insure you're being provided with an unsurpassed combat advantage.
POLARTEC
trademark of Polartec LLC. ©Polartec 2012

Today's Army: The Strength of Our Nation

By GEN Raymond T. Odierno
Army Chief of Staff

The Army continues to serve the nation with pride and distinction. The past year witnessed the successful conclusion to operations in Iraq, culminating in the seamless redeployment of some $54 billion in equipment and the professional transition of forces out of a stable, independent country. We simultaneously built on significant progress in Afghanistan, partnering with the Afghan National Security Forces and setting conditions for long-term stability. With about 60,000 soldiers still deployed there, we remain committed to providing them the very best training, equipment and support possible through the conclusion of our operations. In these two operations and others around the world, our soldiers adapted, learned and distinguished themselves over nearly 12 years of continuous combat.

Special Forces Green Beret soldiers from each of the Army's seven Special Forces Groups.

U.S. Army CPT Tori Schmidt, a physician assistant with the 297th Battlefield Surveillance Brigade, Alaska Army National Guard, examines a patient during Khaan Quest 2012, an annual medical humanitarian outreach exercise in Ulaanbaatar, Mongolia.

Their selfless service and courage are manifest in more than 14,500 awards for valor including six Medals of Honor, 25 Distinguished Service Crosses, more than 650 Silver Stars and more than 4,000 Bronze Stars with "V" devices. Army families persevered through repeated deployments and long separations to emerge stronger than ever before. Our civilian workforce has provided us with unpar alleled expertise and support during these oper ations. These collective sacrifices to the natio are matched only by our dedication to caring fo these soldiers and their families, whether the serve in uniform, transition into the civilia workforce or join the retired ranks. With mor than 185,000 soldiers deployed in more than 16 countries, the Army remains committed to win ning the current fight, setting conditions for stable future and adapting to remain the na tion's force of choice.

GEN Raymond T. Odierno *is the 38th Chief of Staff of the U.S. Army. His previous assignment was commander, U.S. Joint Forces Command. He has commanded units at every echelon from platoon to theater, with duty in Germany, Albania, Kuwait, Iraq and the United States. GEN Odierno served as a brigade executive officer in Operations Desert Shield and Desert Storm, commanded the 4th Infantry Division during Operation Iraqi Freedom, and served as the commanding general, Multi-National Corps-Iraq (III Corps) for the surge of forces in Iraq. He then returned to Iraq as commanding general, Multi-National Force-Iraq and subsequently United States Forces-Iraq from September 2008 until September 2010. Other significant assignments include: arms control officer, Office of the Secretary of Defense; Chief of Staff, V Corps; assistant division commander (Support), 1st Armored Division; deputy commanding general, Task Force Hawk, Albania; director of force management, Office of the Deputy Chief of Staff for Operations and Plans; and assistant to the Chairman of the Joint Chiefs of Staff, where he was the primary military advisor to Secretaries of State Colin Powell and Condoleezza Rice. A graduate of West Point, he holds a master's degree in nuclear effects engineering from North Carolina State University and a master's degree in national security and strategic studies from the Naval War College.*

Understanding the Strategic Environmen

We operate in an increasingly complex strate gic environment. An awareness of current con ditions coupled with the potential impact o global trends must shape how we employ th force in the current fight and how we adapt i going forward. In the past, interactions betwee states were dominated by central government with a substantial ability to enforce their bor ders and represent their populations. Tha framework, while still present, no longer accu rately describes all of our interactions, particu larly those involving the employment of military force.

Accessibility to advanced technology and the prolifera tion of social media have empowered a broad range of ac tors to influence affairs previously limited to state goverr ments. An array of once latent actors has emerged to tak full advantage of this change. Some of the forces that w deal with today, like transnational criminal groups and so cial movements, have always existed but have becom vastly more influential as the norms of the internationa system have changed. New actors have emerged, from th global audience that instantaneously observes and inter prets our actions to communities of like-minded individu als who assemble in cyberspace, unimpeded by distanc and outside state control, in support of a cause or an idea.

As our experiences in Afghanistan and Iraq clearl demonstrated, it is difficult to imagine any future situatio in which a relationship exists solely between two state whether an alliance or a conflict. Other regional actors ca and will seek to advance their own interests in every situa tion and have more tools at their disposal to do so. Some times they will work in concert with our own objective but at other times we may be in opposition. Regardless c the path they choose, our actions must be informed by a awareness of these dynamics.

Sweeping changes such as these have significant effect at the tactical and operational level. We already exper enced the complexities associated with the shift from linea to nonlinear battlefields. Concepts such as deep, main an rear areas quickly lost relevance, replaced by the simultane ous conduct of offense, defense and stability operation against adversaries who intentionally mixed with the pop ulation to defeat precision weapons systems. Army force

f the future will have to contend with this and
uch more.

As much of the world continues to urbanize,
ture battlefields will be cluttered and chaotic.
oldiers must prepare not only for potential
eer competitors but also irregular forces that
xploit complex physical and human terrain
nd have access to advanced weaponry and
ommunications. A wide range of actors oper-
te within this environment, frequently in pur-
uit of objectives that do not align with our
wn. From nongovernmental organizations to
egional and local opportunists to criminal
roups, we must understand and adapt to a fu-
ure in which the ability to distinguish between
iend and foe will be increasingly difficult, re-
ying more on experience and judgment than
echnical solutions.

Concurrently, social media, global commu-
ications and the Internet have empowered
ndividuals and groups at the local level with
he ability to act with strategic effect. Not only
o our own actions receive immediate inter-
ational coverage, but these same tools allow
ur adversaries to shape the narrative to their
wn advantage, often with little regard for the truth. Our
oldiers must be able to operate comfortably within this
xceptionally complex arena, turning opportunity to ad-
antage within an array of thinking adversaries, allies, in-
ermediaries and others all attempting to do the same.

SSG Freddie Goggins Jr. of Battery C, 1st Battalion, 37th Field Artillery Regiment, 3rd Stryker Brigade Combat Team, 2nd Infantry Division, pulls the lanyard and fires an M777 Howitzer at Forward Operating Base Al Masaak, Afghanistan.

The Enduring Utility of Landpower

Understanding the constantly evolving strategic environ-
ment highlights the critical importance of land forces, just as
causes us to constantly adapt to keep pace with the
hanges. Fundamentally, the Army provides the nation with
n incredibly capable, credible instrument of national power
s a critical member of the joint force. Our ability to deploy
eavy, medium and light forces alone or in combination
rovides the nation a wide range of options whenever the
se of force is considered. With continued reliance on the re-
erve component as part of the Total Force, the Army pos-
esses unparalleled strategic depth for employment. Along-
ide their enablers, Army forces are tailorable and scalable
o meet mission requirements. Regardless of the complexity
f the terrain or the duration of an operation, Army units
ave the demonstrated ability to perform tasks across the
ntire spectrum of conflict. From disaster relief to counter-
errorism operations, partnering with host nation forces to
eizing an objective, the Army delivers capable, tailorable
ctive and reserve units for almost any contingency.

Against the complex backdrop of future operations,
round forces offer a unique set of capabilities increasingly
rucial to achieving lasting strategic effects. No sensor can
natch a soldier's ability to distinguish friend from enemy
r discern hostile intent. The discriminating application of
orce, particularly in an increasingly interconnected world, is increasingly a moral requirement that can often be achieved only by working within and among populations. At other times, conflict can be prevented through our engagement. Partnering with allies builds their capabilities and our own while increasing interoperability and trust. All the while, we demonstrate the strength of the world's greatest land force, signaling commitment to friends and deterring potential enemies.

The evolving complexities of the environment also require us to adapt. It is not enough to rest on the laurels of the past 11 years. We must incorporate important lessons learned and project them into the complex future environments that we will encounter, while accounting for the fiscal realities that our country faces. As GEN Omar Bradley, our first Chairman of the Joint Chiefs of Staff, said in 1951: "American Armed strength is only as strong as the combat capabilities of its weakest service. Overemphasis on one or the other will obscure our compelling need—not for airpower, not for seapower—but for American military power commensurate with our tasks in the world."

Improving Capabilities

Mindful of fiscal constraints and in adherence with the 2012 Defense Strategic Guidance, the Army is adapting for the future using three calibrated rheostats—force structure and end strength, readiness, and modernization—to ensure we maintain strategic landpower capabilities. Given that we are still engaged in conflict and aware of the uncertainty and complexity of the strategic environment, we must constantly assess and refine in these three critical areas.

Over the next 10 years, the Department of Defense will reduce its budget by $487 billion. For the Army, much of

A paratrooper assigned to the 82nd Airborne Division's 1st Brigade Combat Team hugs his daughter upon returning to Pope Field on Fort Bragg, N.C., in August.

this reduction will come from downsizing the force from 570,000 soldiers to 490,000 in the active component, an effort that began this past year and will continue in a deliberate fashion through the end of fiscal year 2017. Closely managing this reduction over a six-year period allows us to take care of soldiers, civilians and their families, meet current operational requirements, and respond to unforeseen contingencies. To date, this reduction has had minimal impact on our reserve component structures, allowing the Army to maintain the significant gains made in the operational reserve.

Though similar in size to the Army of just a decade ago, our Army will be fundamentally different in terms of both quality and capability. Besides 11 years of hard-earned combat experience in our ranks, we have made incredible gains in several areas.

Further using the lessons learned from 11 years of sustained combat, we conducted extensive analysis of brigade combat team (BCT) design. Modularity has served our Army well, and we will not walk away from it, but we now have the opportunity to refine our active component and National Guard BCT structure to ensure it remains dominant in tomorrow's dynamic operational environments. Through a combination of warfighter assessments, sufficiency analysis and combat modeling, we determined that significant flexibility and capability are gained by adding a third maneuver battalion, increasing engineers and restructuring other enablers such as fires and logistics within the BCT. While this reorganization results in fewer BCTs, it represents an investment in the overall number of combat battalions and increases capability while reducing overhead associated with brigade-level headquarters.

We also significantly increased intelligence, surveillance and reconnaissance capabilities, enabling us to better understand the environment and make timely, informed decisions. We made tremendous advances in manned and unmanned teaming and increased our rotary-wing aviation, vital to the missions that the Army will perform in the future. Importantly, we continue to increase our ability to conduct cyber operations, a dynamic domain that the Army must dominate. The formation of U.S. Army Cyber Command represented our initial commitment to this effort, and we continue to invest in this vital area, ensuring our ability to operate effectively at the tactical, operational and strategic levels. This will be followed by creation of the Army Cyber Center at the United States Military Academy as another step forward in the development of the cyber warriors of the future.

We also continue to invest in Army special operations forces (SOF), units that make up nearly 60 percent of Special Operations Command in the Joint Force. Operations in Iraq and Afghanistan have clearly shown that our special

Army Rangers with the 75th Ranger Regiment wait while an MH-47 Chinook helicopter lands during a public demonstration earlier this year. The Rangers are a U.S. Army Special Operations (Airborne) unit, a flexible force that can carry out squad-size up to regimental-size operations.

Total solutions. It's in our DNA.

Our world-leading solutions meet your most demanding requirements in space, in the air, on land and at sea. We aspire to redefine adaptability, performance and reliability, for today and tomorrow, to fulfill our dream of a safer and secure world.

IAI

Israel Aerospace Industries | E-mail: corpmkg@iai.co.il | www.iai.co.il

operations forces and conventional forces work better together than apart. We will preserve the strength of this partnership, cementing the relationships between conventional and SOF units across the operational and institutional Army. To that end, we have conducted several rotations at the Maneuver Combat Training Centers, incorporating elements of both to use their unique strengths and capabilities in pursuit of common objectives. As we build on these experiences and further develop the interdependence of our forces, we are studying the interrelationships between populations and their environment that bring conventional and SOF units together to deliver strategic landpower.

Fundamentally, the Army's ability to adapt hinges on the qualities of its leaders. We are evolving our education programs with a focus on strategic thinking skills and operating in a joint, interagency, intergovernmental and multinational environment. Our tactical leaders build situational awareness and gain valuable cultural insights through the Foundry program. The Institute for Noncommissioned Officer Professional Development has implemented a Web-based Structured Self-Development program, providing soldiers and NCOs a tool to bridge operational and institutional learning and conduct guided personal development. The Command and General Staff Officer Course will be a selective one-year program designed to ensure officers have the appropriate skills and education to support commanders in the evolving strategic environment. We also developed the Strategic Planner Program, providing select officers the opportunity to obtain a doctorate in strategic planning. These and other programs will build a pool of strategic leaders at all levels who understand and are comfortable operating in a complex international landscape.

Retaining Readiness

In accordance with the strategic guidance, the Army will be more regionally responsive in support of geographic combatant commanders (GCC). Regionally aligned forces (RAF) will provide GCCs with units specifically trained for employment in their theaters. Brigade combat teams, both active and reserve, as well as divisions and corps headquarters and enabler units, will compose the majority of the RAF.

Training remains focused on core warfighting tasks but will also include security force assistance or cultural training tailored to a specific nation, language or region to support the GCC in shaping his environment. In many cases, units may deploy to their aligned region to conduct multilateral exercises, partner training, staff training, support or enabling operations. Regardless of their exact employment, soldiers will better understand the region of alignment and train to fulfill tasks there. This is complemented by the National Guard's State Partnership program, maintaining more than 60 valuable partnerships with countries around the world.

Implementing the regional alignment of forces will be accompanied by a progressive readiness model. Adapting the Army Force Generation model to future operations, units will progress through a period of training, conduct their operational employment, and then undergo equipment and personnel reset. This model reduces the peaks and valleys between deployments, retaining higher personnel readiness during reset.

All the while, soldiers remain the centerpiece of our force. For the Army, that means a focused emphasis on strengthening resilience. Recent experience has shown that true readiness demands a comprehensive approach, addressing physical, emotional, family, spiritual and social fitness collectively to achieve true resiliency. The Comprehensive Soldier and Family Fitness program builds this resilience and maximizes individual potential by equipping and training our soldiers, family members and Army civilians to face the physical and psychological challenges of today's complex operating environment.

Modernization

The strategic environment requires equipment capabilities that are both affordable and versatile. First and foremost, the Army's modernization program is focused on ensuring our small units remain the best equipped in the world. The centerpiece of our modernization program is the Soldier and Squad Investment strategy.

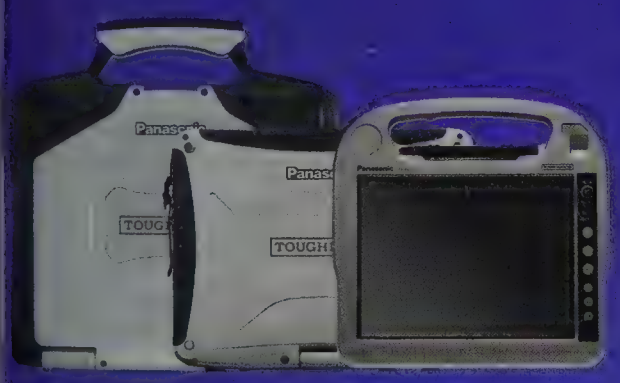
Army Reserve engineer SPC Jenna R. Ingalls operates an excavator during Golden Coyote Exercise in June. Members of the 340th Engineer Company, 458th Engineer Battalion, 411th Engineer Brigade, 412th Theater Engineer Command, helped Native Americans in South Dakota reduce fire risks.

Panasonic
ideas for life

Panasonic recommends Windows® 7.

intel inside
CORE i5 vPro

Access mission-critical information anywhere.
Fully-rugged Panasonic Toughbook® mobile computers, powered by the Intel® Core™ i5 vPro™ processor. Keeping you combat-ready with industry-leading reliability is how we're engineering a better world.



Toughbook 31 Toughbook 19 Toughbook H2

panasonic.com/business-solutions

Visit us at Booth #2651 at AUSA.

Intel, the Intel logo, Intel Core, Intel vPro, Core Inside and vPro Inside are trademarks of Intel Corporation in the U.S. and/or other countries. Toughbook notebook PCs are covered by a 3-year limited warranty, parts and labor. To view the full text of the warranty, log on to panasonic.com/toughbook/warranty. Please consult your Panasonic representative prior to purchase. Panasonic is constantly enhancing product specifications and accessories. Specifications subject to change without notice. ©2012 Panasonic Corporation of North America. All rights reserved. Mission-critical FG-FY12-1

TOUGHBOOK®

SOLUTIONS FOR U.S. ARMY

Soldiers from Company A, 1st Battalion, 21st Infantry Regiment, 2nd Brigade Combat Team, 25th Infantry Division, tactically dismount their Stryker vehicle during Foal Eagle 2012, a combined arms live-fire exercise at Rodriguez Range Complex, South Korea.

One of the hallmarks of the complex future battlefield is the requirement to quickly identify a threat in chaotic environments and defeat it with overwhelming force. An important lesson of the past 11 years is that the American soldier remains the most discriminately lethal force on the battlefield. The Soldier and Squad Investment plan provides our small units with a range of equipment including improved sights, night vision devices, countersniper systems and body armor, all designed to give the soldier on the ground overmatch in any situation.

The Army Network provides the overarching architecture connecting soldiers and their equipment with the data vital to creating overwhelming synergy. Improvements to the Army Network ensure soldiers have the right information from a range of sensors at the right time to make the best possible decisions. It provides the squad with connectivity to joint assets, allowing access to joint firepower systems in the most complex physical and human terrain.

Our replacement for the infantry fighting vehicle, the Ground Combat Vehicle (GCV), is being developed to network this more capable squad, provide detailed information from multiple sources and maneuver it faster to fight with more protection. Similarly, the Joint Light Tactical Vehicle (JLTV) is being developed to replace the aging Humvee and also provide significantly improved connectivity, mobility and security.

In the same manner, programmed aviation improvements will provide our SOF, conventional forces and partners with greater mobility and responsiveness. In total, our modernization efforts will prepare the entire force for the complex and uncertain battlefield by putting a squad with precise information and overmatch capability in the right place at the right time to accomplish their mission.

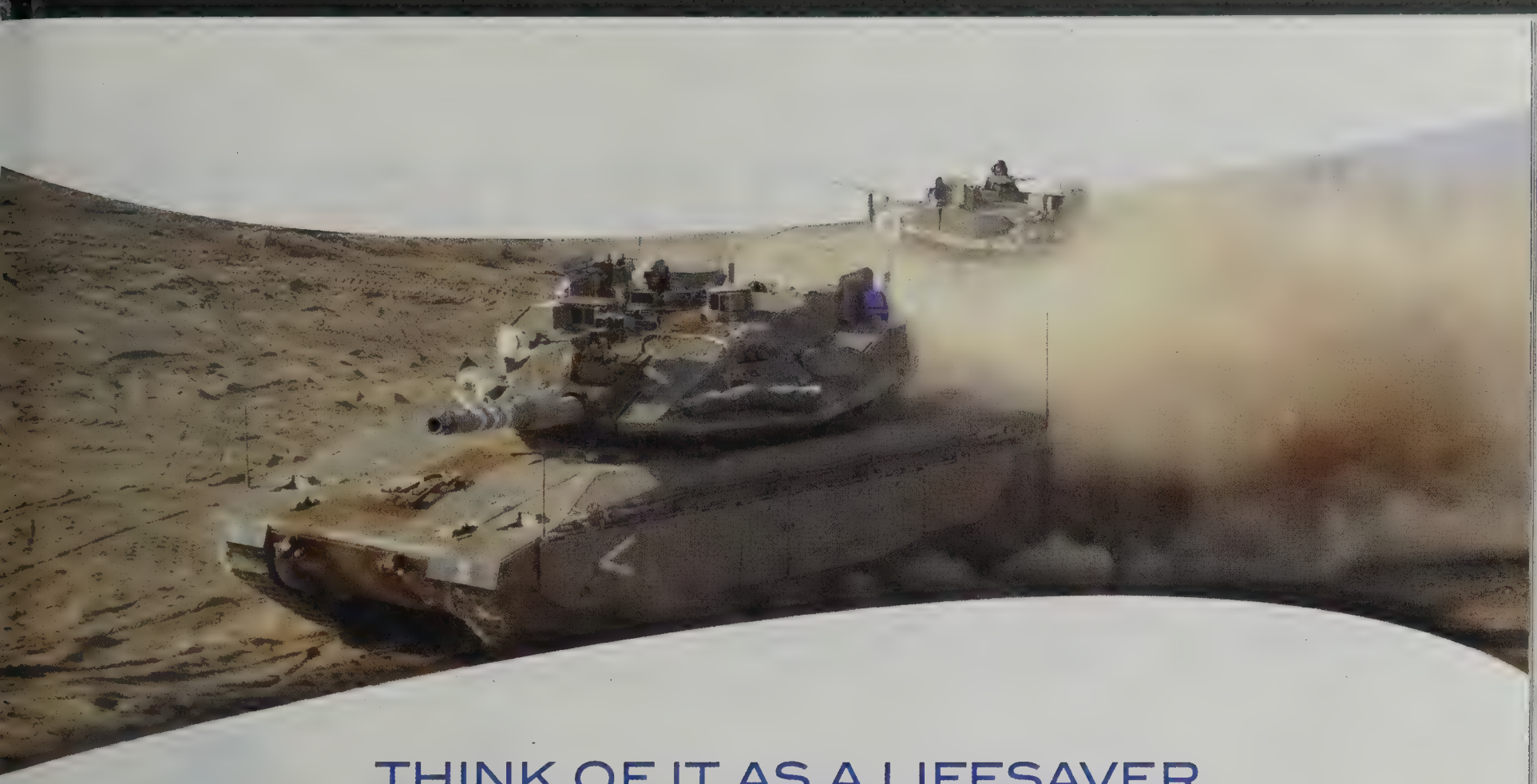
Stewards of the Profession

A common thread runs through all that we do, binding our actions together and defining who we are and what we represent to this great nation. That thread is the stewardship of the profession, of what it means to be a soldier. It is both a responsibility and a privilege: a responsibility to safeguard the heritage, the traditions, and the honor inherent in putting on the uniform of the U.S. Army and serving our nation, and a privilege to uphold the standards, discipline, and dignity of our service for future generations. Whether one is active, Guard, Reserve, an Army civilian or family member, these qualities are timeless, defining who we are and how we serve regardless of how complex the environment may become. As we emerge from more than a decade of war and posture for an uncertain future, it is vitally important that we retain our focus in this area.

It is easy at times to lose sight of the past in the midst of great change. As an Army, however, we are fortunate to be able to draw on more than two centuries of tradition. It is incumbent on each of us serving today to acknowledge and learn from those who came before. Even as tactics adapt and technology advances, the ethical core of our profession remains a constant touchstone to guide our way. Those currently in our ranks were drawn to those values and traditions. Enforcing the standards and good discipline of the force honors our predecessors even as it makes us more effective soldiers and better citizens of the nation. All that we achieve in current operations is done on the shoulders of the vast community of veterans and families that came before us. They are genuine representatives of what it means to be 'Soldiers for Life.'

As we emerge from a decade of war, we have taken great strides to reinvigorate what it means to be a member of the Army profession. Many programs that were modified to meet the demands of frequent deployments have been reenergized. The professional military education system for both officers and noncommissioned officers has expanded, encouraging critical thinking, a renewed focus on core leadership and military skills, and opportunities for structured development tailored to individual soldier needs. Units are using proven programs ranging from command inspections to command supply discipline to training management.

Taken together, these and many other initiatives reinforce what it means to be a soldier, a member of a profession built on trust, guided by shared values and trained to the highest standards. It is this common core that defines who we are and what we represent to the American people. It will steady us during this period of great change. It is why I remain humbled and privileged by the opportunity to serve alongside each of you, uniformed and civilian, active and reserve, veterans and families. You truly are the strength of the nation. ★



THINK OF IT AS A LIFESAVER
RAFAEL'S ARMOR PROTECTION

TROPHY ACTIVE PROTECTION SYSTEM

ADD-ON PASSIVE & REACTIVE PROTECTION SYSTEMS

In combat there is no substitute for exceptional technology and performance. Rafael's - Armor Shield Protection has met real world combat challenges so successfully that it has been adopted by forces the world over.
Adaptable to various fighting platforms, Rafael's armor protection is a field-proven, life-saving shield that guards warfighters against direct hits by KE and CE threats.

Rafael's armor protection.
Your forces deserve nothing less.

RAFAEL

SMART AND TO THE POINT

H.Q. E-Mail: intl-mkt@rafael.co.il
www.rafael.co.il

Australian Office
E-mail: rafael@rafaeloz.com.au

UNABLE TO ORDER THE TOOLS YOU NEED?

THERE IS A SOLUTION.

Kipper Tool Company is applying our industry experience toward solutions to help you, the war fighter, get the modernized tools that you need and the ability to sustain them through their life cycle without all of the hassle.

Contact us today to learn how we're making changes to better serve our nation's heroes.

800-295-9595 | info@kippertool.com | kippertool.com

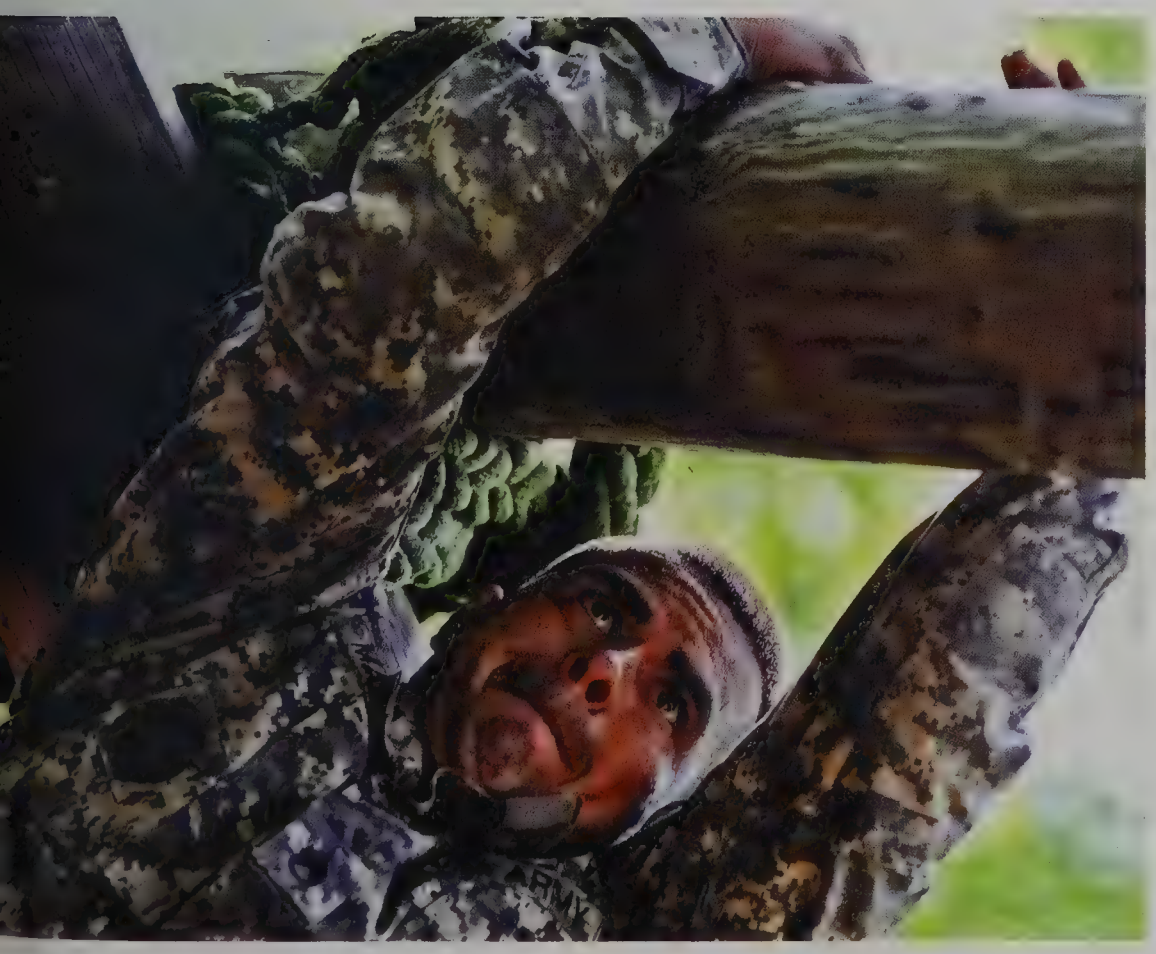
KIPPERTOOL®

The Professional Soldier: The Essence of Today's Army

By SMA Raymond F. Chandler III
Sergeant Major of the Army

I've served as the Sergeant Major of the Army for more than 18 months now, and the best part of my job continues to be meeting soldiers and their families. Last year, I traveled more than 200,000 miles and visited camps, posts and stations around the world, and I am continually amazed by the stories of sacrifice and resilience I hear at each stop.

For example, just a few months ago, my wife, Jeanne, and I visited wounded warriors and their families at Walter Reed National Military Medical Center. Many had lost limbs and were trying to come to terms with their future. One soldier, as he was getting into his new wheelchair, said that the first place he wanted to go was just a few doors down to visit his buddy who was wounded in the same IED blast. He is just one example of the type of soldiers in our Army today.



A color guard with the U.S. Army Drill Sergeant School posts the colors during the school's ribbon-cutting ceremony at Fort Jackson, S.C., in February 2011. The Army's Drill Sergeant Program was established in 1964.

Right now, approximately 185,000 soldiers are forward deployed or stationed in nearly 160 countries around the world, and each is doing amazing work. Some are in places you might never even think about—the Philippines, for example, or the Horn of Africa. Of course, we still have about 60,000 soldiers deployed in Afghanistan; many are now on their third, fourth or even fifth deployment.

Even as we continue fighting and winning our nation's wars, we are an Army in transition, well on the way to meeting our fiscal year 2017 goal of 490,000 in the active component. As we do this, it is imperative that we provide the proper care and services to departing soldiers and their families. Through the Army Career and Alumni Program, we will ensure a successful transition out of the service and into the civilian sector. The Army, in coordination with the Department of Labor and Department of Veterans Affairs, will conduct assistance training and transition counseling for Army personnel beginning at least 12 months from their transition date to enable soldiers to successfully make the transition into civilian society. This deliberate and dignified approach is in keeping with recognizing the extraordinary sacrifice of the American soldier over the last 11 years.

SMA Raymond F. Chandler III *was sworn in as the 14th Sergeant Major of the Army in March 2011. Previously, he served as the 19th commandant of the U.S. Army Sergeants Major Academy (USASMA), the first enlisted commandant in USASMA history. As Sergeant Major of the Army, he serves as the Army Chief of Staff's personal advisor on all enlisted-related matters, particularly in areas affecting soldier training and quality of life. He devotes the majority of his time to traveling throughout the Army observing training and talking to soldiers and their families. SMA Chandler sits on a variety of councils and boards that make decisions affecting enlisted soldiers and their families and is routinely invited to testify before Congress. He has held a variety of leadership positions throughout his career, ranging from tank crewman to command sergeant major. He has served in all tank crewman positions and has had multiple tours as a troop, squadron and regiment master gunner. He has served in the 1st Infantry Division (FWD), 2nd Infantry Division, 4th Infantry Division, 1st Cavalry Division, 3rd Armor Division, 2nd and 3rd Armored Cavalry Regiments, U.S. Army Garrison—Fort Leavenworth, Kan.—and the U.S. Army Armor School. SMA Chandler holds a bachelor's degree in public administration from Upper Iowa University.*

Our NCOs and mid-grade officers are the key to ensuring we are keeping the best soldiers in our ranks. Unlike other services, the centerpiece of our Army is the soldier, so it's imperative that we keep only those who deserve to wear the uniform of a United States soldier. Our soldiers are values-based and ethical professionals who continue to play a critical role in ensuring our Army is the best and most respected force in the world.

Our soldiers and Army civilians continue to adapt to unpredictable challenges and have performed magnificently in every assigned task and mission. To ensure that we build upon this success and set the conditions for success in the future, the Army initiated the Army Profession Campaign last year. Part of this campaign includes five essential characteristics that define us as professionals.

Trust is earned through our ability to maintain the other four characteristics in everything we do and everywhere we serve. Our soldiers' *Military Expertise* ensures that we are able to fight and win our nation's wars. *Esprit de Corps*

DIGITAL DOMINANCE

US4CES™ CAMO

INTRODUCING THE US4CES FAMILY OF CAMOUFLAGE.

Designed specifically for the U.S. Army Camouflage Improvement Effort, these digital textured patterns feature the latest advances in camouflage research for reduced signature and enhanced survivability.

ABOUT THE U.S. ARMY FAMILY OF CAMOUFLAGE PROGRAM

Ongoing Army research concluded one color scheme for all environments was too much of a compromise. Recognizing the need for specific color schemes for each key environment to provide a more effective camouflage, the Army launched the Camouflage Improvement Effort in 2011. Currently in Phase IV, the program requirement is to find one pattern configuration with separate colors for Woodland, Arid, and Transitional environments. Additionally, the Army is exploring a potential fourth pattern for Organizational Clothing and Individual Equipment (OCIE) and Personal Protective Equipment (PPE) to integrate with the three other patterns.

DIGITAL SUPERIORITY

WHY DIGITAL? Digital patterns outperform non-pixelated or analog shapes because they are superior at re-creating natural fractals – geometric shapes found in nature – that the brain interprets as background noise. Digital patterns also generate advanced micro- and macro-patterns, providing the optimum breakup of the human form at multiple distances, in multiple environments.

OCIE/PPE | Woodland | Transitional | Arid

ADS®

855.819.4276
ADSINC.COM/US4CES

Visit adsinc.com/us4ces to see the difference and learn more about US4CES and the U.S. Army Camouflage Improvement Effort.

VISIT US AT AUSA BOOTH #: 2413

Active duty military personnel can present this ad to an ADS representative to receive a complementary US4CES tactical ball cap while supplies last. You can also enter our daily drawing for a chance to win other US4CES gear!

© 2012 ADS, Inc. The ADS logo is a registered trademark of ADS, Inc. US4CES is a trademark of ADS, Inc. and Guy Cramer. A0260 8/12

Sergeant Major of the Army (SMA) Raymond F. Chandler III delivers remarks for National Post-Traumatic Stress Disorder Awareness Day on Capitol Hill, in Washington, D.C., in June.

helps foster fortitude, pride and cohesion among soldiers. Soldiers with *Honorable Service* embody the Army Ethic and our values. Finally, our continued *Stewardship of the Army Profession* ensures that resources are well managed while our soldiers and civilians continue being the professionals our nation expects them to be. Our Army is doing a great job, but there is still a lot of work to be done. Suicide, hazing, post-traumatic stress, and sexual assaults and harassment are just a few of the major concerns our Army faces today.

We know there isn't one cure-all to fix these issues. We do know that engaged leadership is a great first step. That means our small-unit leaders are communicating consistently with their soldiers. A long time ago a retired command sergeant major told me something that has always stuck with me: "Every soldier should have an NCO checking on him or her every day." That's engaged leadership, and that's the leadership we'll need to fix these problems.

Despite these issues, however, our soldiers continue to do a tremendous job. They have done all we have asked of them and more. The professionalism, dedication and sacrifice they display every day are the reasons our Army is the envy of every other in the world.

Here's one example of that professionalism. Earlier this year, I traveled to a small combat outpost in Afghanistan called Bari Alai. This remote, platoon-sized camp sits high atop a mountain, and the only way to get on or off this outpost is by helicopter.

On top of this mountain, I met the 3rd Platoon, Company A, 1st Battalion, 12th Infantry Regiment, 4th Brigade Combat Team, 4th Infantry Division. During the visit, I had the privilege of awarding them the brigade's first Combat Infantry and Combat Action Badges.

These eight young men—five infantry soldiers, two generator mechanics and one cook—had never deployed before. Most were under 21, yet they decisively engaged the enemy less than 24 hours after arriving at the outpost. The enemy knew that the platoons were rotating and decided to test their defenses, but 3rd Platoon was ready. They re-

After pinning the Combat Infantry Badge on PFC Casey Loos, SMA Chandler thanks 3rd Platoon, Company A, 1st Battalion, 12th Infantry Regiment, 4th Brigade Combat Team, 4th Infantry Division soldiers at Combat Outpost Bari Alai, Afghanistan, for their dedication and service.

ISMOUNTED FIRE RESISTANT ENVIRONMENTAL ENSEMBLE (FREE)

om flame and wind to rain, sleet, and snow, dismounted rfighters face a broad range of environmental threats on the ttlefield. Dismounted FREE is a versatile FR solution that provides mplete protection from the elements and flame threats.

sed on the form and function of the U.S. Army GEN III ECWCS and lizing FR performance characteristics of the U.S. Army FREE System, smounted FREE uses the latest textile and FR science to keep smounted warfighters comfortable, dry, warm, and protected in the st inclement conditions.

Undershirt & Drawers | Mid-Weight Shirt & Drawers | High-Loft Fleece Jacket | Soft Shell Jacket & Trousers | Extreme Wet/Cold Jacket & Trousers | Extreme Cold Parka & Trousers

CONTACT ADS TODAY FOR MORE INFORMATION.

855.819.4276
ADSINC.COM/DISMOUNTED-FREE

VISIT US AT AUSA BOOTH #: 2413

Active duty military personnel can present this ad to an ADS representative to receive a complementary US4CES tactical ball cap while supplies last. You can also enter our daily drawing for a chance to win other gear!

COMPLETELY FR
Fire resistant throughout for dismounted warfighters at greater risk of being exposed to fire.

INTEGRATED
Available in OCP or UCP and integrates with the FR ACU.

VERSATILE
Configurable to address personal climate tolerances.

BREATHABLE
Light weight with high moisture movement to keep body dry and comfortable.

EXTREME PROTECTION
Enhanced comfort and protection from - 40° F to 60° F

IMPROVED DESIGN
Athletic fit for enhanced layering, freedom of movement, and reduced bulk.

THE ADS TEAM OF PARTNERS REPRESENT THE PINNACLE OF PERFORMANCE & MATERIALS:

DRIFIRE COMFORTABLE FR WEAR | DuPont Nomex | GORE-TEX | Milliken | POLARTEC

012 ADS, Inc. The ADS and Dismounted FREE logos are trademarks of ADS, Inc. All other trademarks or registered trademarks are the property of their respective owners. Photo courtesy of U.S. Army. A0261 0612

Best Warrior contestant SGT John Colemanares prepares to enter a building during the Warrior Tasks and Battle Drills portion of the 2011 Best Warrior Competition. This year's contest, shorter and more quickly paced, took place October 15–18 at Fort Lee, Va.

SFC Juan Torres gets a last-minute hug from his young son Daniel during predeployment activities. SFC Torres was one of more than 70 soldiers from the Division Headquarters and Headquarters Battalion, 1st Infantry Division, who departed Fort Riley, Kan., in April for deployment to Afghanistan.

pulsed the attack and, just as important, sustained no injuries during the firefight.

It's a testament to that young platoon leader, who had been with the platoon less than a month before deploying and ensured his soldiers were ready for combat. It's a testament to that platoon sergeant, who ensured his soldiers, regardless of military occupational specialty, were trained in their Warrior Tasks and Battle Drills. And of course, it's a testament to the young men who comprise 3rd Platoon. Each had given the same oath: to support and defend the Constitution. Each lives the Army Values: Loyalty, Duty, Respect, Selfless Service, Honor, Integrity and Personal Courage. Each lives the Warrior Ethos: I will always place the mission first, I will never quit, I will never accept defeat and I will never leave a fallen comrade. This platoon is just one example of the type of professionals who make up your Army.

But our soldier does not stand alone. Only a select few can be at the pointy end of the spear. Our Army would not be successful without the 278,000 Army civilians who are committed to serving them and our nation. Our civilians equip our soldiers, feed them and transport them. They are a vital cog in the Army machine, and we would not be successful without them. Not only do they serve at home when soldiers deploy, but they are also on the front lines, ensuring our soldiers have what they need to accomplish every mission.

And of course, no soldier would be successful without his or her family. Millions of husbands and wives, sons and daughters, and moms and dads have watched their loved ones go off to war … some have even lost their greatest treasure in support of this country. These families endure the same hardships as the deployed soldier; they move across the country when it's time for a soldier to permanently change station, and they give up jobs, homes and schools. You cannot say enough about our Army families. They have done everything we've asked of them and more. Our families have proven time and time again to be the most resilient group in the country.

It's this group—our soldiers, Department of the Army civilians and family members—who make up the Army Family. They are the pride, soul and heart of our Army, and I could not be prouder to serve with them.

The strength of our nation is our Army … the strength of our Army is our soldiers … and the strength of our soldiers is our families. This is what makes us Army Strong. ★

Copyright ©2012 Michelin North America, Inc. All Rights Reserved. The Michelin Man is a registered trademark of Michelin North America, Inc.

Michelin's next generation military tire, the MICHELIN® XZL2™, was designed specifically for heavy trucks that work off-road in soft-soil conditions such as the JLTV.

The MICHELIN® XZL2™ tire features a redesigned tread pattern that offers greater speed capabilities and improved tread life over a wide range of terrains. Available in sizes 365/80R20 and 395/85R20, the MICHELIN® XZL2™ tire offers lower ground contact pressure without sacrificing its off-road capabilities and toughness. It's just one more way *The Right Tire Changes Everything.*™

MICHELIN
A better way forward

COMMITTED TO MISSION SUCCESS.

From wireless mobile platforms to multiple wavelength sensors to state-of-the-art defense systems, Raytheon delivers innovative, scalable technology that helps soldiers safely achieve mission success. Every solution is designed to help the Army effectively face and conquer its challenges at a time of limited budgets and evolving threats.

LEARN MORE ABOUT RAYTHEON'S SOLUTIONS FOR THE ARMY.

INNOVATION IN ALL DOMAINS

www.raytheon.com

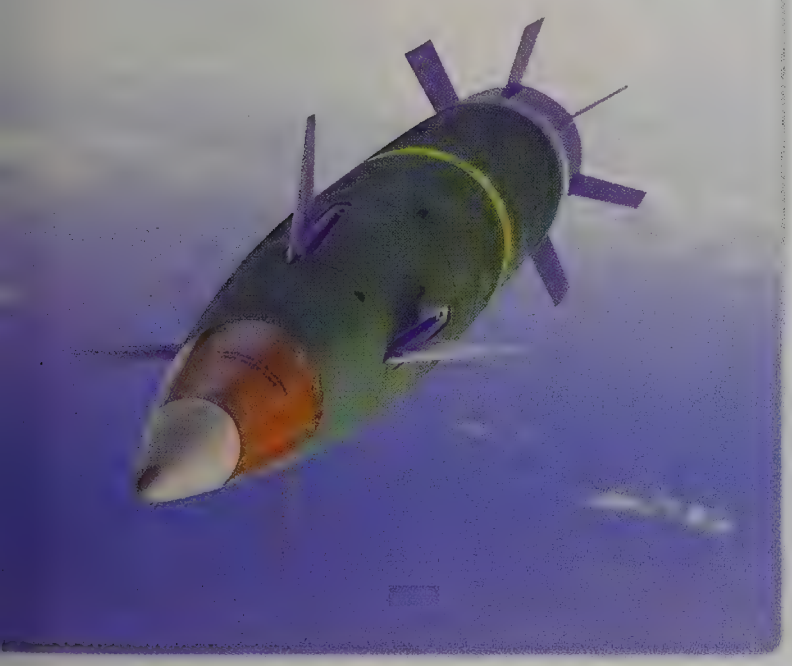
Follow us on:

© 2012 Raytheon Company. All rights reserved.
"Customer Success Is Our Mission" is a registered trademark of Raytheon Company.

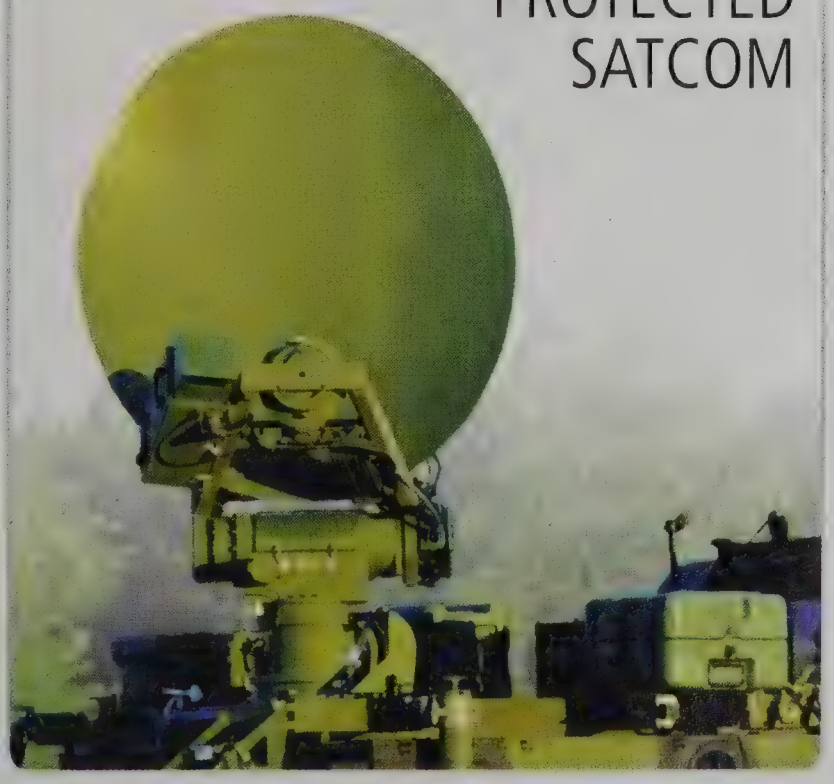
SENSOR SOLUTIONS

AIR AND MISSILE DEFENSE SOLUTIONS

PRECISION EFFECTS



PROTECTED SATCOM



Raytheon

Customer Success Is Our Mission

ARMOR WORKS

PROTECTION IS OUR PASSION®

PLATES, VESTS,
& PLATE CARRIERS

AIRCRAFT ARMOR

PROTECTIVE
UNDERGARMENTS
[PUGz]™

PROTECTIVE
OUTER GARMENT
[POGz]™

MARITIME ARMOR

HYENA™
FAST ATTACK &
RECON VEHICLE

SHOCKRIDE® MINEBLAST
ATTENUATING SEATS

VEHICLE ARMOR

LTATV
ARMOR, BLAST PROTECTION
& FIGHT KITS

305 N. 54TH ST. • CHANDLER, AZ 85226 • P: 480.598.5700 • F: 480.598.5739 • ARMORWORKS.COM

Supporting the Total Force: Soldiers, Civilians and Families

By Thomas R. Lamont
Assistant Secretary of the Army
(Manpower and Reserve Affairs)

As the Assistant Secretary of the Army for Manpower and Reserve Affairs—ASA (M&RA)—I am honored to supervise and oversee numerous functional areas, including recruiting, readiness, mobilization, force management, medical and health affairs, professional and leader development, military and civilian personnel programs, and the Army's Equal Employment Opportunity and diversity programs. Every day I am impressed by the talent, commitment and spirit of the soldiers, civilians and family members that make up our Army, and every day we work to develop and execute policy and programs to ensure they are taken care of.

Undoubtedly, the Army that served us so well during more than a decade of war is not the same Army our nation requires to meet our changing

Alaska National Guard PVT Lathaniel Ulofoshio provides security for fellow members of the Kandahar Provincial Reconstruction Team while conducting a site survey of the Sanjaray health clinic in Kandahar, Afghanistan.

national security challenges. Fittingly, we must adjust our priorities to meet the needs of a smaller Army. I would like to highlight a few areas the M&RA office is currently focusing on in order to shape the Army of the future.

Civilian Drawdown

This year the Army took steps to reduce its civilian onboard strength to meet funded targets established by the Secretary of Defense and reflected in the President's fiscal year (FY) 2012 budget. The Army conducted exhaustive reviews to identify specific functions, activities and workload for elimination and/or reduction.

Working together, the ASA (M&RA) and the Assistant Secretary of the Army (Financial Management and Comptroller) established policies, business processes and reporting mechanisms to effectively align requirements, authorizations, onboard strength and associated funding execution for the civilian workforce. In accordance with statutory restrictions and the Secretary of the Army's instructions, service contracts were not initiated in lieu of reduced civilian manpower, nor were existing contracts modified to accommodate work formerly performed by civilian employees.

***Thomas R. Lamont** is the Assistant Secretary of the Army for Manpower and Reserve Affairs. He is the former chairman of the University of Illinois Board of Trustees and served as a judge advocate general in the Illinois Army National Guard for more than 25 years. He was the Illinois Staff Judge Advocate and retired as a colonel in 2007. He received his bachelor's degree from Illinois State University and earned his law degree from the University of Illinois College of Law.*

To the maximum extent possible, the Army relied on voluntary departures and attrition to achieve many of the necessary personnel reductions. Reshaping tools to effect voluntary departures included Voluntary Early Retirement Authority and Voluntary Separation Incentive Pay.

The Army will continue to shape its civilian cohort to meet the needs of the future force. For example, although we have reduced our civilian workforce, we have worked to increase the number of employees in support of the Sexual Harassment/Assault Response and Prevention program, Army Substance Abuse Program, and Soldier and Family Assistance.

Civilian Workforce Transformation

The Civilian Workforce Transformation (CWT) is the Army's strategy and supporting campaign plan to transform the Army's civilian cohort. When mature, CWT initiatives will enable a flexible and adaptable Army civilian workforce fully capable of supporting the Army and the nation. CWT seeks institutional change across the Army enterprise and more responsive and flexible development and delivery of the right person to the right place at the right time.

CWT is designed not only to provide better management of the Army's civilian workforce from an enterprise perspective but also to develop a more capable civilian who is both technically proficient and well-grounded as a leader. The Army needs knowledgeable civilian leaders who are innovative, think creatively and systematically, embrace change, work collaboratively, understand the value and skill of partnering, and are empowered to solve needs and problems.

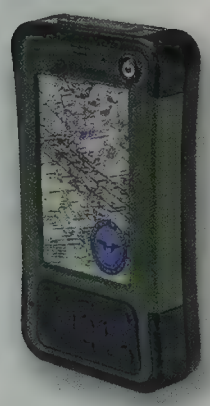
CWT's FY 2012 goal was to bring all 31 career programs to initial operating capability so that career program managers can fulfill their new roles and responsibilities. With that milestone accomplished, in FY 2013 CWT will focus on identifying competencies in more than 270 occupational series. This is a major undertaking that will require the support of Army commands and supervisors as well as Army civilians and their respective career program managers.

For civilians, CWT provides a career program with the appropriate training and development opportunities to realize one's career goals within the Army. For commanders, CWT provides the right workforce with the right training and development for current and future mission requirements. For the Army, CWT provides a strategic program to meet current National Defense Authorization Act requirements and to successfully operate in the fluid environment of the future. For the nation, CWT provides the investment in human capital required to effectively manage the institutional Army now and in the future.

The Senior Enterprise Talent Management (SETM) program will also revolutionize talent management for Army civilians. SETM is the Army's method for utilizing existing and new programs under one system to better identify and manage the talent within our GS-14/15 (and equivalent) population. The SETM program is composed of the following four modules: Senior Service College, Defense Senior Leader Development Program, Project-Based SETM Temporary Duty and Enterprise Placement Program.

VT Miltope

A company of VT Systems



RUGGED RUNS DEEP IN THIS FAMILY

A Case for Rugged... The next generation of VT Miltope products are built rugged down to their core processors. Now, the fastest brains match the toughest brawn. Whether in the laptop, convertible laptop, handheld PDA, or mounted computers, the Miltope family of products can support the mission in any environment. In garrison or in the field, they're qualified to operate in the most extreme conditions. The Miltope Family... built rugged for generations.

Computers · Handhelds · Disk Drives · Mass Storage · Printers · Network Communication Devices · Product Support for Military & Commercial Applications

Total Force Policy

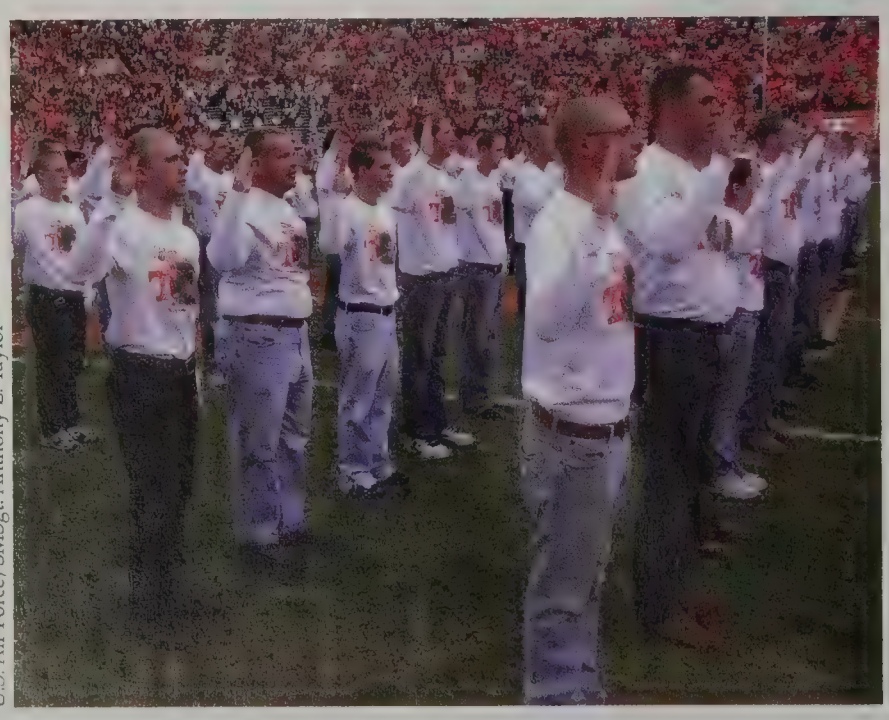
The new Total Force Policy marks a milestone in our Army's history. The policy recognizes that the United States needs more forces and more capabilities than it can afford to keep ready to deploy at any given time. The nation relies on reserve component forces more than ever, but much remains to be done to complete the integration of the active and reserve components. The new Total Force Policy lays out the way ahead.

Today's strategic environment demonstrates why the Total Force Policy is so important. The main strategic assumption is that operational demand will decrease in the future. At the same time, constrained fiscal resources are driving a significant reduction in active component end strength. Meanwhile, global economic turmoil and increasing instability point to even greater uncertainty and security threats in the years ahead. Department of Defense policies require the services to organize, staff, train and equip their active and reserve components as integrated operational forces to provide maximum capabilities and flexibility for a complex security environment. Current national security threats, budgetary constraints, and DoD policies make timely integration of the active and reserve components into the total force essential.

The new Total Force Policy outlines a number of measures the Army will take to ensure integration of the active and reserve component forces, including:

- Executing an annual examination of force structure options and the mix of active and reserve component forces.
- Establishing uniform procedures and processes for validating the predeployment readiness of assigned active and reserve component units and soldiers.
- Promoting procurement programs and equipping processes that enable the total force to perform the Army's missions.
- Developing and implementing an integrated personnel management and pay system.
- Establishing personnel policies that facilitate opportunities for soldiers to move between active and reserve component assignments throughout their careers.
- Ensuring that standards for qualification and professional development will be the same for active and reserve personnel.

Congress weighed in on the issue of integration of the reserve components by passing legislation to ensure that DoD has full access to, and makes good use of, those forces. It authorizes the Secretary of Defense to call up reserve component forces to fulfill two essential missions: support to civil authorities in response to natural disasters or emergencies, and support to combatant commanders in missions that are vital to U.S. national interests.



U.S. Air Force/SMSgt. Anthony L. Taylor

A hundred new U.S. Army soldiers enlist in the Tennessee Army National Guard during halftime at a University of Tennessee-Vanderbilt University football game in Nashville.

A Culture of Respect

The U.S. Army is a reflection of America, with virtually every possible ethnic and religious group represented. Our servicemembers are judged by their performance, never by race, color, religion or gender.

The Army's vision is to become the national leader in embracing the strengths of a diverse population in an inclusive environment. We will continue to invest and manage talent, value individuals, and develop culturally astute soldiers and civilians. The Army will continue to pursue an aggressive and comprehensive strategy that ensures leader commitment, managed talent, the best available diversity training and education, and inclusive environments sustained by informed leaders.

We continue to work through the challenges of addressing the difficult problems of sexual harassment and sexual assault. New policy changes have been implemented that provide us with additional tools. First, the 2012 National Defense Authorization Act requires at least one full-time sexual assault response coordinator and at least one full-time sexual assault victim advocate to be assigned to each brigade or equivalent unit level of the armed forces. We are currently working resourcing issues to make this happen. Second, we will expand services to family members throughout the Army, DoD civilians outside the continental United States and DoD contactors assigned abroad in support of contingency operations.

It is vital that everyone in the Army understands that sexual assault and sexual harassment are simply contrary to what we hold to be true in our profession of arms. These crimes affect our readiness and tear at the fabric of trust that forms the foundation of our Army values. At its core, sexual assault is an issue that ultimately contradicts our Army values: loyalty, duty, respect, selfless service, honor, integrity and personal courage. These are the values that drive us that have shaped the best Army in the world, and that shape our nation.

We are proud of the soldiers, civilians and families who serve our country, and we are committed to providing them the opportunities and care they deserve, from improving the civilian workforce to enhancing the Army's readiness for missions to strengthening the Army's culture of respect. ★

USA ANNUAL • 22–24 OCTOBER, 2012 • BOOTH#: 861

OWN THE MISSION

ONGSBERG'S PROTECTOR transforms any military vehicle into an unbeatable lethal and
icure platform. With its superior target acquisition and precision fire control systems,
ewmen can immediately identify and defeat targets within a 1,000-meter radius. And
s innovative design enables effective machine gun operation from within the safety of
e vehicle's armored capsule. Proven, with over 10 million hours of successful combat
rvice, PROTECTOR owns the mission.

ONGSBERG

PROTECTOR CROWS

ONGSBERG Protech Systems
2[illegible] Duke Street, Suite 600 · Alexandria · VA 22314 · USA
one: +1 703 838 8910 Fax: +1 703 838 8919
usoffice@kongsberg.com

When You are The Target You Need to Know.

UTC Aerospace Systems Laser Warning Systems help to safeguard crews on thousands of military aircraft and ground vehicles worldwide. Alerts are activated precisely when you're targeted by lethal threats like Laser Range Finders, Laser Designators and Laser Beam Rider missiles.

Learn more at
www.utcaerospacesystems.com

UTC Aerospace Systems Laser Warning Systems provides you and your crew with a new level of situational awareness and precious extra seconds. Seconds needed…to detect hostile threats… to fire and maneuver out of harms way… to SURVIVE.

t 203-797-6323
e mbrogno@utas.utc.com

UTC Aerospace Systems

Army Equipment Modernization: Preparing to Deliver Future Decisive Capabilities

By Heidi Shyu
Acting Assistant Secretary of the Army
(Acquisition, Logistics and Technology)
and
Army Acquisition Executive

Equipping the U.S. Army is a tremendously complex endeavor. While we often focus on some of the endemic challenges it carries—cost and schedule risks, lack of flexibility due to prolix regulation and funding instability—it is worthwhile to note that we continue to succeed in fielding the best equipped Army in the world, by any margin. Our ongoing success over the course of two centuries is grounded in two overriding principles: a paramount commitment to the soldier's safety and mission success, and an uncommon ability to adapt to change. The latter principle recognizes that Army modernization consists of more than a set of upgraded weapon systems; it reflects a perspective embracing adaptation and

Two variants of mine resistant ambush protected (MRAP) vehicles operated by the 170th Infantry Brigade Combat Team return to Camp Spann from a patrol in Afghanistan's Baghlan Province. The urgent demand for MRAPs required the Army to field as many as it could of different makes and types within a year.

change in response to threats. As we look ahead to the next era of Army equipping modernization, the only known certainty is that such adaptation will again prove critical.

Change is What the Army Does

Consider that as recently as 12 years ago, at the start of the 21st century, the Army found itself in the initial stages of transformation to a restructured force. Not a single mine resistant ambush protected (MRAP) or double-V hull Stryker vehicle had yet been fielded, and the state of available technology would have precluded a Network Integration Exercise from forming such a valuable part of our processes. As we began combat operations in Afghanistan and Iraq, the Army essentially went to war with the equipment we had: systems designed to fight large land battles during the Cold War. Few military planners or strategists could have adequately predicted that our investments would shift so rapidly to armored vehicles and other enhanced force protection efforts, including counter-improvised explosive devices.

The need for new technologies to solve unforeseen threats and problems unleashed a wave of innovation and creative strategy designed to meet the pressing need for change. The aforementioned MRAP vehicles and MRAP All-Terrain Vehicles were delivered in 12 and 15 months, respectively; both were engineered to improve soldier protection and capability. The combat-proven, blast-deflecting Stryker double-V hull was only a drawing in 2010. Today, there are more than 300 systems saving soldiers' lives in Afghanistan. In addition, unmanned aircraft systems changed how we fight by providing our commanders with highly accurate intelligence, surveil lance and target acquisition data. We also focused on other in novations such as pelvic protection gear and state-of-the-a flame-resistant uniforms to safeguard our soldiers.

The strategic landscape, as it always does, continues t evolve. The Army is already preparing for the end of com bat operations in Afghanistan and adapting to strategi planning guidance calling for a greater focus on the Asia Pacific region and greater emphasis on responses to so phisticated, technologically proficient threats. This calls fo a well-equipped, technologically enabled Army prepare with cutting-edge intelligence, surveillance and reconnais sance capabilities that is also prepared to respond to cybe intrusion and electronic warfare threats, among others While we succeeded in rapidly meeting the dangerou threats inherent in ongoing counterinsurgency operation started in the last decade, the threat remains. We cannot a ford to begin the process of changing to meet future cha lenges once they are already upon us. This next wave o modernization must begin now.

Enduring Lessons from the Past Decade

As an initial step, the Army must recognize the endurin value of certain lessons from the last decade of combat as prepares for future change. The rapidly accelerating pace o technologies incorporated into our interdependent system demands unprecedented agility that calls for redefining th public-private partnership to use the best outcomes of com mercial off-the-shelf (COTS) innovation and government in vestment. We have learned that the commercial market ca succeed in delivering cutting-edge solutions for Army re quirements given the opportunity. Moving forward, we sim ply cannot afford the time and cost involved in developin capabilities that a commercial market already provides. Th defense industry has proven itself consistently resilient an

***Heidi Shyu**, a member of the Senior Executive Service, is the acting Assistant Secretary of the Army for Acquisition, Logistics and Technology and principal deputy—the latter a position to which she was appointed in November 2010. Her previous experience includes roles supporting Raytheon Company, Litton Industries, Northrop Grumman Corporation and Hughes Aircraft Company. A graduate of the University of New Brunswick, Canada, she has master's degrees in mathematics from the University of Toronto and in electrical engineering from the University of California, Los Angeles.*

LIGHT ON WEIGHT.
HEAVY ON PROTECTION.

The Lockheed Martin Joint Light Tactical Vehicle is production-ready and blast-proven. Our vehicles have been through a rigorous boot camp of mountainous and desert terrain. They've driven over 160,000 combined miles. And while JLTV is heavy on force protection, Army and Marine helicopter lift tests also show it is light and transportable. Its dual performance for both the Army and the Marines makes it the most affordable choice for any mission. Equipped with Lockheed Martin's systems integration experience and BAE Systems' innovative protection, we're making sure JLTV is secure, reliable and ready to go.

THE LOCKHEED MARTIN TEAM

LOCKHEED MARTIN BAE SYSTEMS

JLTV

www.lockheedmartin.com/jltv

CW2 Dylan Ferguson, a brigade aviation element officer with 1st Brigade Combat Team, 82nd Airborne Division, launches a Puma unmanned aerial vehicle in Ghazni Province, Afghanistan, in June. Drones, which perform intelligence, surveillance and reconnaissance missions for troops on the ground, are in high demand.

capable of adapting to changes in missions and needed capabilities when given the opportunity.

Whether capabilities are acquired through COTS or Army development, we have also learned that system interoperability is more crucial than ever. The true value of the Network Integration Exercise is its ability to demonstrate the challenges brought by integrating multiple technologies that must interoperate on a joint battlefield. In addition, the Army has taken significant steps toward developing a common operating environment—a set of standards, technical architectures and policies designed to ensure that ongoing modernization efforts maintain needed interoperability and further enhance the capability the Army delivers to soldiers, now and in the future. We can be certain that technology will develop in unforeseen and unpredictable ways. The interdependence of our systems will warrant increased attention in the future.

Similarly, we learned that the Army can benefit from increased use of modeling and simulation in the development and testing of weapon systems. As our budget realities present funding constraints, there is a real need for processes that save both time and money in expediting the fielding of needed equipment. Increased reliance on high-fidelity modeling and simulation technology can shorten development schedules by eliminating unnecessary testing and reduce sustainment costs by enabling realistic training for soldiers responsible for maintaining weapon systems. These and other lessons from the past decade of combat are integral to our future equipping efforts, regardless of the threat.

Preparing to Meet Unforeseen Challenges

Since 9/11, the Army adapted many of its processes to meet the exigencies of the past decade. Now, as we prepare to depart Afghanistan, the challenge will be to quickly develop new processes and revise existing ones to meet the next wave of challenges. In the area of equipment modernization, the Army must initiate a comprehensive investment strategy that allows us to make short-term decisions based on long-term objectives. The development of modernization plans and programs based on what we can spend against what we need was appropriate in the middle of two major combat operations, but such an approach is ill-suited as a means to prepare the Army for the unknown future. Our modernization choices must be deliberate and focused. W need to implement a strategic approach to modernizatio that includes an awareness of existing and potential gap and seams, an understanding of peer nation capabilities knowledge of state-of-the-art commercial, academic, an government research, as well as a clear understanding o competing needs for limited resources.

This approach must ensure that our investment deci sions—whether in science and technology (S&T) research o formal programs of record—are continuously refined to ad dress ongoing challenges, changes and discoveries. Arm S&T investments must be carefully harnessed to maximiz our technological advantage in future conflicts. This re quires a sober assessment of emerging threats against cur rent capabilities, analysis and consensus on future missio sets, and critical enabling technologies needed to maintai our leading advantage. The Army cannot afford to ever los its technological advantage. The Army's S&T investmen process must become proficient at identifying important ar eas of Army research needed to provide future capabilities.

Over the past year, the Army has begun a comprehensiv assessment of these current and needed capabilities acros all mission portfolios. Our investments today must translat to capabilities we successfully field to the Army of the fu ture. Of course, all of these decision-making processes mus keep pace with our national strategy and evolving threats.

In the final analysis, a period of change to a new set o challenges is upon us. Our ongoing success in equippin the Army as successfully as we have in the past will de pend on our current efforts to discern and prepare for th future. I am, however, confident that we will succeed. W cannot afford to fail. As Dwight Eisenhower once noted "Neither a wise man or a brave man lies down on th tracks of history to wait for the train of the future to ru over him."

The world is complex.
Your decisions don't have to be.

Precision strike?

Delivering precision effects within the battlespace while avoiding collateral damage

Cyber defense?

Active defense of cyberspace

Situational awareness?

Increased operational tempo through shared intelligence across own, coalition and friendly forces

Threat detection?

Early detection, prioritization and faster reaction to threats

Networked communications?

Enabling the rapid escalation of decision making in the heat of the battle

Mission optimization?

Reducing crew workload during complex tasks to shorten reaction time

Power projection?

Providing logistical solutions for the deployment and direction of forces

Decisions about defense are increasingly complex. At Thales we serve all branches of the armed forces for air, land, naval, space and joint operations – as well as the new threat environments of urban security and cyberspace. Our interoperable, scalable solutions and services provide operational mission support where time and reliability are critical. By embedding all our systems, equipment and solutions within our Critical Decision Chain, we enable decision-makers to master complexity in critical scenarios and make timely decisions that obtain the best outcomes.

To find out more about our Defense solutions, scan the QR code or visit **thalesgroup.com**

THALES

Together • Smarter • Safer

2013 ARMY Magazine Photo Contest

Sponsored by the Association of the U.S. Army

The Association of the U.S. Army is pleased to announce its annual ARMY Magazine photo contest. Amateur and professional photographers are invited to enter.

The winning photographs will be published in ARMY Magazine, and the photographers will be awarded cash prizes. First prize is $500; second prize is $300; third prize is $200. Those who are awarded an honorable mention will each receive $100.

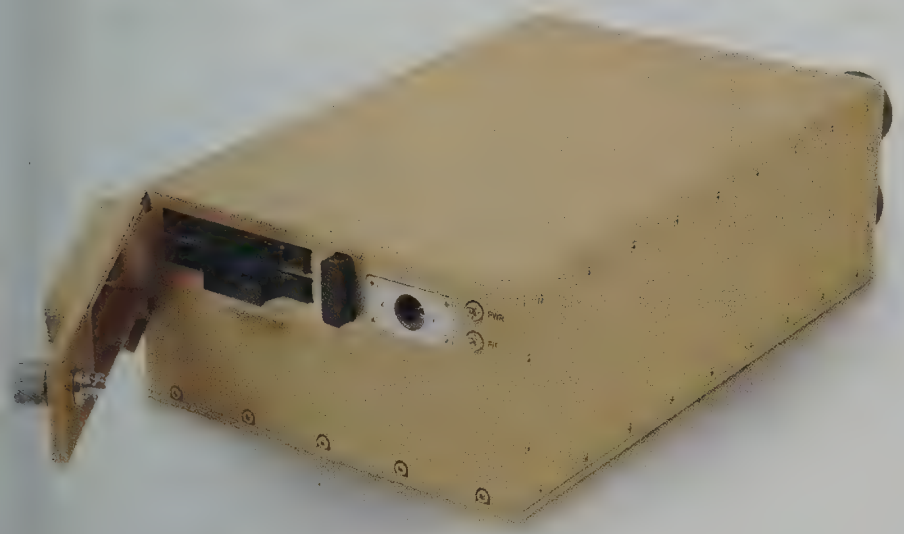
Entry Rules:

1. Each photograph must have a U.S. Army-related subject and must have been taken on or after July 1, 2012.
2. Entries must not have been published elsewhere. Evidence of prior publication of any entry will disqualify it.
3. Each contestant is limited to three entries.
4. Entries may be 300-dpi digital photos, black-and-white prints or color prints. Photographs must not be tinted or altered. (Send digital photos to tspincic@ausa.org.)
5. The minimum size for prints is 5x7 inches; the maximum is 8x10 inches (no mats or frames).
6. The following information must be provided with each photograph: the photographer's name, address and telephone number, and caption information.
7. Entries must be mailed to: Editor in Chief, ARMY Magazine, 2425 Wilson Blvd., Arlington, VA 22201-3385, ATTN: Photo Contest.
8. Entries must be postmarked by July 31, 2013. Letters notifying the winners will be mailed in September.
9. Entries will not be returned.
10. Employees of AUSA and their family members are not eligible to participate.
11. Prize-winning photographs may be published in ARMY Magazine and other AUSA publications three times.
12. Photographic quality and subject matter will be the primary considerations in judging.

For further information, contact Tom Spincic (tspincic@ausa.org), ARMY Magazine, 2425 Wilson Blvd., Arlington, VA 22201; (703) 907-2604.

For examples of past winners, see www.ausa.org/publications/armymagazine/aboutarmy/Pages/ARMYMagazineAnnualPhotoContest.aspx

RUGGED COMPUTING SYSTEMS FOR OEM

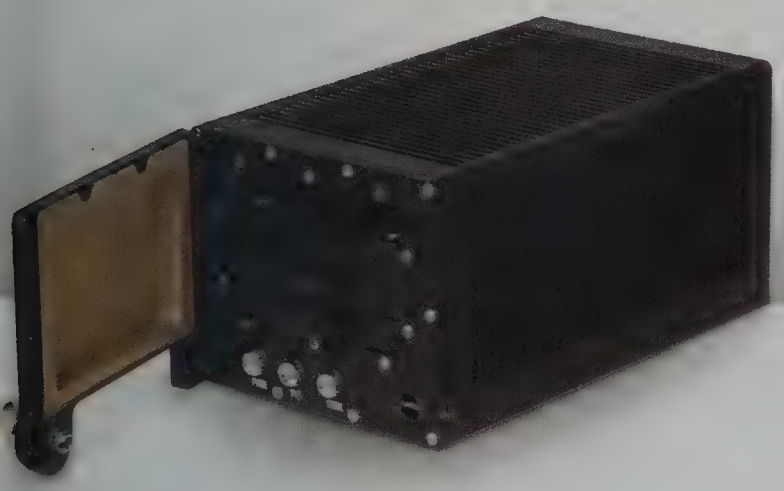


"ZEUS" SZC91X

Rugged, Six-Way Secure Virtual Machine Server, Westmere® CPU w/96GB RAM with ECC, Dual Removable Drives for up to 2TB of storage. Ultra-Small overall footprint only 13"x7.5"x4"

"GOLDEN-EYE III" S902R4

Rugged, Small, Lightweight, Quad Core Intel® i7(Ivy Bridge) System w/16GB RAM with ECC and Quad Removable SSD for up to 4TB of storage. Small 7"x5.5"x4" and 6.5lbs.
(Available in 2 drive configuration)

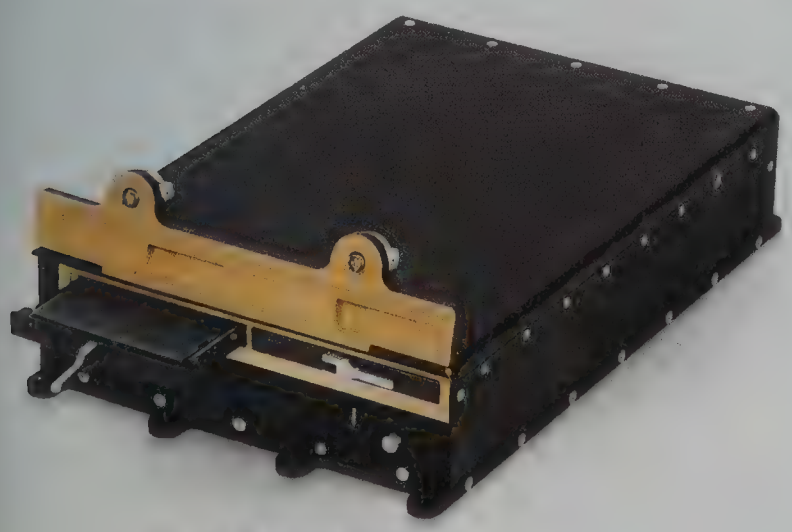


"DEPOT" SX401R4 NAS

Rugged, Fully Sealed, Low-Power Intel® Atom™ System w/2GB of RAM and Quad Sealed Removable SSD for up to 4TB of storage. Ultra-Small and Lightweight only 6.5"x3.5"x3", and 3lbs.
(Remains sealed even when drives are not engaged)

"ARMOR" S822D

Rugged, Core 2 Duo® Penryn System w/8GB of RAM, Ultra-Rugged Display and Dual Removable SSD for up to 2TB of storage. Ultra-Small only 8.5"x13.25"x2.75"



"AXIOM" S279X

Rugged, Ultra-High Performance, Dual/Quad Core Xeon® Server w/up to 32GB RAM with ECC and Dual Removable SSD up to 2TB. Ultra-Small 11"x7.5"x1.75"

GMS COMPUTING ENGINES

GENERAL MICRO SYSTEMS, INC.
Powering the Embedded Market Since 1979
800-307-4863 **gms**4sbc.com

AS9100 REGISTERED FIRM

TRUSTED COMPUTING GROUP™

All Rugged products are fully-sealed and Extended temp -40°C to +85°C Compliant to MIL-STD-810G, MIL-STD-704E and MIL-STD-461F

All GMS products are proudly designed and manufactured in the U.S.A. and are fully ITAR compliant. © 2012, General Micro Systems, Inc.

Only John Deere can work in lock step with your agency across such a wide range of initiatives, thanks to such a wide array of equipment and support that spans the globe. Let's take on the world together. Visit us at AUSA booth 1013.
Or JohnDeere.com/Military.

JOHN DEERE

Ready to Build · Cut · Power · Haul · Excavate · Secure · Deliver

53760

Enhancing Mission Effectiveness Through Power And Energy Advancements

By Katherine Hammack
Assistant Secretary of the Army
(Installations, Energy and Environment)

The Army's ability to accomplish its mission on a global scale depends on secure, uninterrupted access to power, energy and water. In today's complex operating environment and volatile energy market, the long-standing assumption that the Army would have unlimited availability of abundant, affordable and accessible fossil fuels is no longer valid. In fact, our mission effectiveness is at risk because of our dependence on increasingly expensive fossil fuels and a singular reliance on a fragile electric infrastructure. On the battlefield, we rely heavily on fuel convoys to meet our energy needs. At our installations, the grids we depend upon for electricity, water and other utilities create vulnerabilities that can be readily exposed by acts of nature or threats of man.

A new tent being tested at the May Network Integration Evaluation features greater temperature control and quieter generators. It is also easier to set up. The Army is equipping the dismounted soldier with advanced power systems that are lighter, more capable and have fewer logistical requirements.

To ensure mission effectiveness, our Army is making a deliberate commitment to improve energy security across the entire Army enterprise. Energy security is defined as having assured access to reliable supplies of energy as well as the ability to protect and deliver sufficient energy to meet mission essential requirements. Improving energy security requires reducing demand through increased efficiency as well as building resiliency through the integration of renewable and alternative energy sources.

Our Army has declared energy security to be a priority. Accordingly, we are driving it into our policies, doctrine, equipment, training and installation management practices. Energy security and sustainability are now significant aspects of our Army campaign plan, explicitly represented in Campaign Objective 8-0. In addition, we recently established requirements for operational energy in an initial capabilities document in order to develop a well-defined range of operational energy capabilities throughout the Army. Of greatest importance, we are working to change Army culture to ensure that energy security becomes an integral consideration not only in our planning and decision making but also in the actions of each of our soldiers. Each must become a "power manager" who understands and appreciates the effects that individual actions and decisions have on accomplishing their unit's and the Army's overall mission.

The Energy Security Framework

The Army is focusing our activities to achieve energy-related advancements and improve our overall energy security through the framework of "Soldier Power," "Basing Power" and "Vehicle Power." Soldier Power is the energy and associated systems, information and processes required for a dismounted soldier. Basing Power is the fuel, water and energy needed at installations and forward operating bases. Vehicle Power is the energy associated with our air and ground-tactical and non-tactical vehicles. The Army is actively pursuing a diverse range of initiatives in volving all aspects of doctrine, organization, training, ma teriel, leadership and facilities. Collectively, these advance ments are changing both the technology the Army employs and the manner in which the Army plans and ex ecutes its operations.

Soldier Power

The energy needed to power a soldier's equipment in the field affects not only the soldier's reach but also his or he mobility, agility, interoperability and sustainability. The Army is actively deploying advanced soldier power sys tems that are lighter, more capable and have significantly reduced logistical requirements. Several of these systems were tested in May during the Network Integration Evalua tion (NIE), a soldier-led exercise. Soldiers provided feed back and assessments on network and non-network capa bilities to the Army's industry partners so we can accelerate fielding and expedite adjustments to the technology upon which they depend.

Throughout the NIE, soldiers tested new technologies such as the Soldier-Worn Integrated Power Equipment Sys tem (SWIPES) vest. The vest reduces the number and types of batteries a soldier must carry by providing a persona network that makes it possible to share power among sev

Katherine Hammack *is the Assistant Secretary of the Army for Installations, Energy and Environment. Previously, she was a leader in Ernst and Young LLP's climate change and sustainability services practice. She has more than 30 years of experience in energy and sustainability advisory services. A certified energy manager, LEED-accredited professional and certified indoor air quality manager, Hammack holds a bachelor's degree in engineering from Oregon State University and an MBA from the University of Hartford.*

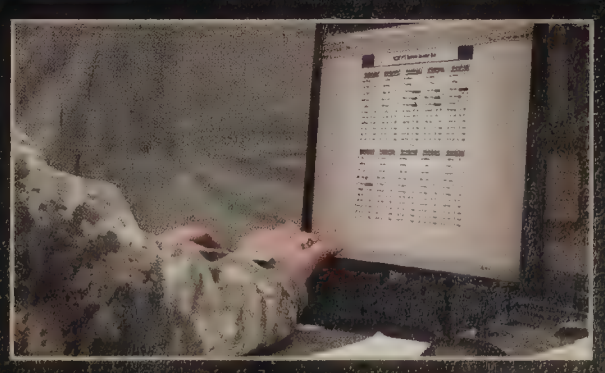
DRASH®

THE WARFIGHTER'S CHOICE

INTELLIGENT POWER TECHNOLOGY®

REDUCE FUEL CONSUMPTION AND STREAMLINE POWER MANAGEMENT WITH A SINGLE NETWORKED POWER MICROGRID

DRASH Intelligent Power Technology® (IPT) is an advanced smart system enabling users to connect several digital trailer-mounted generators together to form a networked power microgrid. Once activated, each generator is automated to turn "on" and "off" based on real-time power demands and can be remotely monitored from inside your TOC refocusing more soldiers on the true mission. Not only does DRASH Intelligent Power Technology® offer exceptional fuel savings, it reduces wear and tear and works everywhere you do. To learn more about how DRASH Intelligent Power Technology® delivers more sustainable power for your needs, contact one of our representatives.



DHS SYSTEMS LLC
A DHS TECHNOLOGIES COMPANY

1-877-GO-DRASH drash@drash.com www.drash.com/ipt

The Joliet, Ill., Army Reserve Training Center is the first Army Reserve center to use solar panels, which generate 80 to 90 percent of the facility's electricity needs.

eral devices through a central rechargeable battery. Through SWIPES, Soldier Power managers can draw power from vehicles, wall plugs, flexible solar blankets or even partially charged batteries to recharge the soldier's network. Patrols and units are better able to sustain themselves on extended dismounted missions, and they are less vulnerable to interruptions and attacks on convoys. Two of the Army's airborne brigade combat teams deployed to Afghanistan are using many of these technologies. Plans are under way to accelerate fielding throughout the Army.

Basing Power

Army installations and contingency bases—whether supporting combat operations or training—are vulnerable to their dependence on aging electric grids and/or convoy resupply. To ensure mission effectiveness and decrease these inherent vulnerabilities, our Army is working to establish secure energy and water supplies.

Energy security requires three important attributes. First, it must be highly efficient. We must reduce electrical loads through energy efficiency measures and behavioral change. Second, it must be equipped with a power management system. Smart grids, for example, prioritize and match loads with supply. Third, to add resiliency, it must have access to reliable sources of base load power that make use of reliable fuel sources such as renewable or alternative energy sources.

Energy security is enhanced throug
our Net Zero initiative, the Energ
Initiatives Task Force, and the Rapi
Equipping Force's Energy-to-the-Tac
tical-Edge (E2E) effort. Net Zero pilo
installations are innovative, holistic ap
proaches to designing and managin
resources at their installation not onl
in energy but also in water and soli
waste. The Energy Initiatives Task Forc
is actively developing large-scale re
newable projects through a robust pro
ject development pipeline with mor
than 180 potential projects being eva
uated. Renewable energy is critical t
having a resilient supply of on-bas
energy. The Army's goal is one gi
gawatt of installed capacity by 2025—enough energy t
power 250,000 homes. E2E involves fielding hybrid energ
systems that include new generators paired with photo
voltaic panels and battery power storage. These system
reduce manpower needed for operations and maintenanc
optimize generator performance, save fuel and improv
the ability of combat outposts to operate in silence. For ex
ample, at one combat outpost where fuel resupply wa
provided by air, these efforts saved 120 gallons of fuel pe
day, freeing both ground and air assets to perform othe
missions.

Since 2003, the Army's total installation energy cor
sumption has decreased by 13 percent even as the tota
number of personnel assigned, both military and civilian
has increased by 20 percent. We have significantly in
creased our efforts in energy efficiency. Through energ
savings performance contracts, the private sector has in
vested more than $1.03 billion to date on Army installa
tions. Annual energy savings of more than 9.45 trillio

A three-kilowatt hybrid power generator provides the energy required to operate a Rapid Aerostat Initial Deployment Tower, which can transmit real-time data, images and video via three-dimensional display to soldiers on the ground.

INTRODUCING AN ENTIRELY NEW GOVERNMENT SERVICES PROVIDER WITH 40 YEARS OF EXPERIENCE.

Engility is our new name, but this is not a new company. Our heritage is built on more than 40 years of proven performance. Engility is a dedicated government services contractor employing highly skilled professionals in the United States and around the world who are the best at what they do.

Solely focused on achieving your mission, Engility will deliver wherever, whenever, in a cost-effective manner with absolute integrity. In today's challenging economy, our streamlined structure delivers maximum value and gives us the agility to respond to any challenge quickly and efficiently.

With a legacy of success, Engility is your first and best partner for mission success. **Visit engilitycorp.com.**

ENGILITY

Your Mission. Our Commitment.

Visitors arrive for the opening ceremony at the Ground Systems Power and Energy Laboratory at Detroit Arsenal in Warren, Mich., in April. The 30,000-square-foot facility, which features eight state-of-the-art power and mobility laboratories, will provide unprecedented ground-vehicle testing and evaluation capabilities.

British thermal units per year have been achieved through this program. An additional $600 million in investments will be contracted during the next two years.

Just as we have done on our permanent installations, we are increasing efforts in energy efficiency on our forward operating bases. Fielding of the new Advanced Medium Mobile Power Sources has been accelerated. As compared to their predecessors, these generators are up to 21 percent more fuel efficient, have reduced total ownership costs, increased reliability and enhanced power generation capability. More efficient power generation, coupled with effective distribution systems, will yield even more savings. The U.S. Army Corps of Engineers has installed 28 minigrid distribution systems across our bases in Afghanistan. These systems are removing wasteful spot generation and are already saving approximately 50 million gallons of fuel annually, equivalent to eliminating 55 truckloads of fuel per day. Through fuel savings, these investments will pay for themselves in less than 12 months. More important, they decrease risk to our soldiers by reducing both fuel convoys and the associated security force requirements.

Vehicle Power

The Army is aggressively pursuing energy advancements for mounted and aviation operations. Focusing on endurance, range, flexibility and interoperability, we are exploring ways to reduce fuel consumption in both our tactical and our non-tactical vehicle fleets. In a tactical environment, improved vehicle fuel efficiency can translate into increased mission effectiveness with fewer fuel convoys, a smaller logistics footprint and greater endurance. The Army is incorporating the latest technologies into its tactical fleet. To ensure the flexibility to operate on bio-fuel blends when they become readily available, we are certifying our tactical vehicle fleet to use these fuels.

The newly opened Ground System Power and Energy Laboratory (GSPEL) provides the Army's ground vehicle experts with the ability to test vehicle systems and components under a variety of conditions, which will lead us to more efficient and mobile Army ground vehicles. GSPEL is expanding the Army's abilities to employ cutting-edge power, energy and mobility technology for all current and emerging vehicle classes.

The centerpiece of the GSPEL is the Power and Energy Vehicle Environmental Laboratory. One of the world's most unique test chambers, this environmental laboratory enables full mission profile testing under various environmental conditions. This includes temperatures ranging from minus 60 to 160 degrees Fahrenheit, relative humidity of up to 95 percent, and wind speeds of up to 60 miles per hour. To test and assess hybrid-electric and fuel cell vehicles, this lab provides researchers the ability to simulate multiple types of terrains and replicate almost any road condition.

For non-tactical vehicles, the Army is participating in a multi-service pilot to test electric vehicle charging alternatives. A significant part of this pilot is testing the concept of vehicle-to-grid in which an electric vehicle can be used to "sell" power back to the grid. Vehicle-to-grid allows the Army to provide services to utility providers, including peak shaving and frequency regulation, which increases both grid stability and power quality. In addition, we are replacing our fleet with more fuel-efficient models. Currently, more than 41 percent of our fleet (32,600 vehicles) are alternative fuel or hybrid. As a result, the Army reduced its non-tactical petroleum use by 8 percent in 2011. The Army is on track to meet or exceed all federal fleet management mandates by 2016, four years ahead of schedule.

Energy Security Enables Mission Effectiveness

The Army of today has opportunities to enhance mission effectiveness through power and energy advancements. We must continue to make prudent decisions to ensure that the Army of the future has access to the energy, water, land and other resources it needs to shape, prevent and win. By increasing our energy alternatives across the domains of soldier, basing, and vehicle power, we are working to use finite supplies of energy to best advantage. The development of force-wide energy doctrine and operating principles—coupled with technological investments, operational training, education and facilities management—improves our overall energy security and, in turn, our ability to perform our global mission. ★

READY NOW

AM General's BRV-O JLTV is ready to meet warfighters' demands for a new light tactical vehicle. Designed around the warfighter, BRV-O sets a new benchmark in light tactical vehicles with combat-proven protection, unsurpassed mobility and greater performance.
It's what you expect from AM General—America's most experienced light tactical vehicle company.

AM General®

BRV-O: BLAST RESISTANT VEHICLE - OFF ROAD

www.amgeneral.com

© 2012 AM General LLC

THERE'S A NEW WAY TO **SAVE ON YOUR NEXT CAR.**

Let our low rates put you behind the wheel of your next car! With an auto loan from Navy Federal, you can upgrade your ride and save hundreds.

Active and retired military can save an additional 1/4% APR.*

NAVY FEDERAL® Credit Union

ARMY
MARINE CORPS
NAVY
AIR FORCE
DoD

navyfederal.org 1.888.842.6328

Federally insured by NCUA. *Direct Deposit required. This military special may expire at any time. Applications accepted at a branch and by phone only. Rate discounts can be applied, but cannot bring the rate below the lowest advertised auto rate as of the date of this publication. App Store℠ is a service mark of Apple, Inc. Android™ is a trademark of Google, Inc. © 2012 Navy Federal NFCU 11076-OCT (8-12)

Available on the App Store

Google play

Leading the Army's Financial Transformation

By Mary Sally Matiella
Assistant Secretary of the Army
(Financial Management and Comptroller)

The Army's financial management transformation continues to build momentum and demonstrate progress. In the last three years the Army has experienced unprecedented changes in its financial management operations, and more are coming. The result will be an Army that can produce timely, relevant and accurate financial information that supports the highest standards of military readiness.

Changes to the business environment come at a time of great challenge to all of the military services. Ten years of war have strained the military and those who wear its uniforms. Add to that the reduction of defense budgets. While recognizing the nation's fiscal challenges and the spending caps established by the Budget Control Act of 2011, any adjustment to the Army's budget must maintain balance in force

structure, readiness, modernization efforts and commitments to the all-volunteer force to avoid placing the readiness of the force at risk.

It is in this context that improved financial operations and strengthened fiscal stewardship are top priorities throughout the enterprise. The Secretary of the Army (SA) and the Chief of Staff of the Army (CSA) made these priorities clear in the Army Campaign Plan and the Secretary's top priorities list. In addition, Congress requires the Department of Defense to obtain clean audit opinions. Congress mandated an unqualified audit of all financial statements by the end of fiscal year (FY) 2017. Secretary of Defense Leon E. Panetta assured Congress that all of the services will have an auditable statement of budgetary resources (SBR) by 2014.

Financial management transformation, however, is about more than just an audit. Only when we know what we have from a resource perspective can we properly manage our operations and plan for the future. Stronger financial management, validated by a clean audit opinion, leads to a stronger Army overall. We are seeing a culture shift whereby personnel at all levels understand their impact on the Army's fiscal health. Managing resources is no longer just a comptroller function.

It is, however, the comptroller's responsibility to lead the effort and support commanders to bring about this seismic organizational shift. We must develop sustainable solutions to these budget challenges through continued financial management transformation.

Achievements in 2011–2012

Sustainable transformations come about through systemic changes to technology, processes and people. The Army's achievements this past year show progress in all three of these areas.

General Fund Enterprise Business System. In July, the Army completed deployment of the General Fund Enterprise Business System (GFEBS) to 52,000 users worldwide. GFEBS is now one of the largest enterprise resource planning (ERP) systems in the world, eventually replacing more than 100 Army legacy systems. GFEBS brings automated processes and controls to the Army's financial transactions, which reduces manual inputs, duplication and risk of errors. The system has internal controls enforcing business rules and requiring separation of duties. These benefits lead to more timely, accurate and reliable information generated from one system of record feeding the Army's financial statements.

Mary Sally Matiella *is the Assistant Secretary of the Army (Financial Management and Comptroller). Previously, she served as assistant chief financial officer for accounting for the Department of Housing and Urban Development and as the chief financial officer for the U.S. Department of Agriculture Forest Service. She has an MBA from George Washington University.*

Making the transition to a new system is never a simpl undertaking. Those who have been using GFEBS for mor than two years, however, report greater efficiency, particu larly at the fiscal year end, when compared to the legac systems. The lessons learned have been documented an used to improve training. Enhanced GFEBS training give users better insight into end-to-end processes, helps ther understand why processes need to be executed in a certai way and instills in them the role of fiscal steward.

Improved processes and internal controls. GFEBS facilitate process standardization for a specific set of transactions re lated to the statement of budgetary resources. The Army re ceived validation of these process improvement effort when, in November 2011, an independent public accountin (IPA) firm examined a set of business processes at the firs three GFEBS sites. The IPA firm's audit opinion found star dardized business processes across all three sites. This is great accomplishment since process standardization inte grated across Army operations reduces the risk of reportin errors and enhances audit readiness.

Business process improvement efforts are larger i scope than just GFEBS transactions. The Office of the As sistant Secretary of the Army (Financial Management an Comptroller)—ASA (FM&C)—has conducted audit read ness site visits to installations, examining processes spar ning all Army functional areas—resource managemen budget execution, acquisition, civilian and military pe sonnel pay, asset management, and logistics. The aud readiness teams identified deficiencies and worked wit the sites to implement corrective action plans putting e fective internal controls into place to ensure accurate f nancial reporting.

ASA (FM&C) uses Lean Six Sigma (LSS) to improve bus ness processes and support the Army's audit readiness, eff ciency and other financial management improvemer goals. Financial managers at all levels have used LSS t identify major cost drivers and eliminate rework, wa times, duplication and redundancies. One LSS success wa a 90 percent reduction in the time required to develop a re port on the cost of war, from 40 hours per month to fou hours. We encourage Army financial managers to sponsc LSS projects within their areas of responsibility to improv the efficiency and effectiveness of their processes.

An accountable workforce. The Army has greatly increase fiscal accountability at all levels. The SA has directed sup port for financial improvement efforts. With support of to Army leadership, governance boards ensure that financi improvement efforts have the input and buy-in from all c the Assistant Secretary offices and commands. Senior civi ian leaders have audit readiness performance require ments in their annual appraisals. Our site on Army Know edge Online (AKO) has a guide and checklists to hel leaders pinpoint problem areas and correct them. (Searc for "audit readiness" on AKO.)

Financial management transformation has been mad possible through training. ASA (FM&C) has been on th ground training more than 5,700 civilians and military sta

BG Stephen B. Leisenring (left), deputy commander, Joint Theater Support Contracting Command, U.S. Central Command, studies notes during the General Funds Enterprise Business System Senior Leader Summit hosted by Third Army at Camp Arifjan, Kuwait, in April.

n audit readiness internal controls for business processes. This is in addition to the user training for GFEBS.

Goals for the Year Ahead

We will build on the momentum created through these financial improvement initiatives by demonstrating progress towards our audit readiness goals, strengthening asset accountability and advancing a culture of accountability across the Army.

Audit readiness goals in 2013 and 2014. The Army will continue towards its audit readiness goals, in particular the SBR 2014 audit readiness mandate. We anticipate a successful second examination of the GFEBS environment in 2013, which will include nine processes and 10 installations, building upon the unqualified opinion on appropriations received and a qualified opinion at three installations for GFEBS statement of budgetary resources. The second examination will be followed by an Army-wide third examination by 2014, which should provide lessons learned, experience and understanding of what the Army needs to successfully assert audit readiness by the fall of the same year.

Accountability in logistics management. The Army is conducting additional audit readiness assessments of the ERP systems, not only strengthening internal controls within GFEBS but also addressing the Global Combat Support System-Army and the Logistics Modernization Program. The Army expects to receive, in early FY 2013, positive results from an audit of three missile programs (Hellfire, Javelin and TOW—tube-launched optically tracked wire-guided). This demonstrates effective internal controls for managing inventory of these missiles.

The Army will assert the existence ("book to floor") and completeness ("floor to book") of real property at approximately 20 installations. These efforts will expand to all installations in 2013 and will result in an audit readiness assertion for all real property by September 30, 2014.

Advancing the Culture of Accountability. ASA (FM&C) will continue its focus on enlisting Army leaders as champions of financial improvement and providing support to those in the field to facilitate this momentous change. Advancing the culture of accountability and cost control in an organization as large as the Army seemed improbable a few years ago, but it is within reach. This year, leadership efforts continue to focus on commanders, who will receive reports that provide insights into the audit readiness levels of their organizations. We will continue to expand training offerings so that people at all levels have the knowledge, skills and abilities to do their jobs.

Resource-Informed Decision Making/ Leadership-Driven Cost Management

ASA (FM&C) is spearheading efforts to change the Army to a cost-culture mentality. The Army's cost-culture business initiative is the backbone of promoting resource-informed decision making and continuous improvement through leadership-driven cost management. The essential elements for this transformation are engaged leaders; knowledgeable cost staff; regular, periodic cost review processes; accurate, reliable financial data; and, finally, good cost measurement. The Army has established cost-education programs designed for military and civilian financial, operational and functional managers. The Principles and Intermediate Cost Analysis and Management courses are for junior and mid-careerist levels, respectively, and the Cost Management Certificate course is designed for senior-level careerists. An executive course is under development for general officers and senior executives.

Army leadership has established clear priorities that provide a ready and capable Army while continuing to be good stewards of all our resources. We are implementing efficient and adaptive processes, while making the Army a more agile, cost-effective organization. The Army is working to provide readiness at best value to live within the constraints imposed by the national and global economic situation. The efforts to transform the Army's financial management operations are ambitious but absolutely necessary. We owe it to Congress, the American taxpayers and our very own soldiers to hold ourselves to the highest standards of accountability in our operations. ★

PROTECT TROOPS FROM HARM.

With the new Bobcat® Loader Radio Remote Control System, troops can operate Bobcat loaders without being in the cab. The frequency hopping spread spectrum technology allows troops to control Bobcat loaders within line of sight from up to 500 meters away. The system can be changed from traditional in-cab operation to remote operation in a matter of minutes. The tough, dependable Bobcat loaders provide another solution to adapt to changing threats, do more complicated jobs with fewer soldiers and protect the safety of our troops. Bobcat is delivering on the military's future need for remotely operated vehicles today. Now available through DLA and GSA contracts.

www.bobcat.com/remote **1.877.505.3580**

Bobcat® and the Bobcat logo are registered trademarks of Bobcat Company in the United States and various other countries.
©2012 Bobcat Company. All Rights Reserved | 834R-6

Bobcat

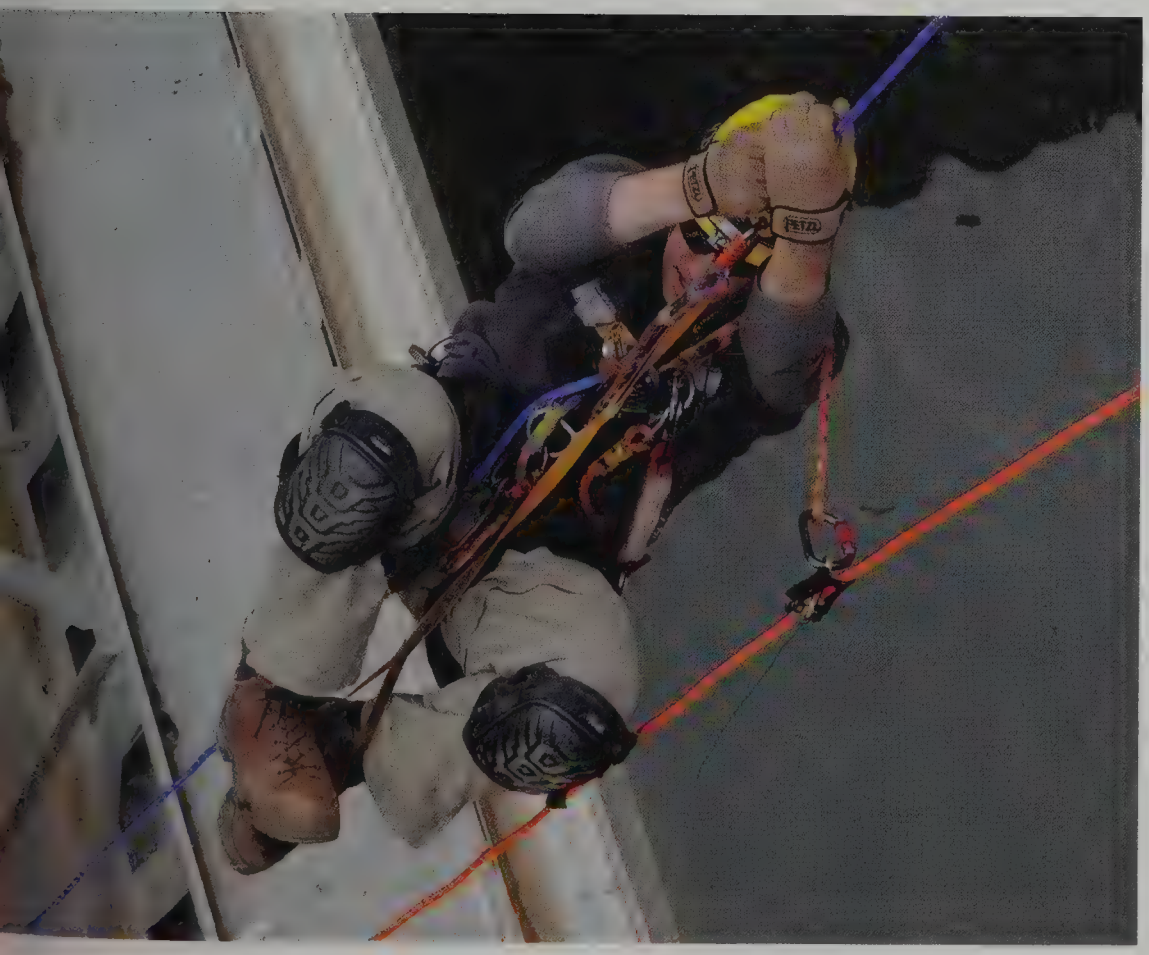
One Tough Anima

Transforming and Modernizing For the Future

By Jo-Ellen Darcy
Assistant Secretary of the Army
(Civil Works)

The Army Secretariat for Civil Works' responsibility to the nation is to develop and restore our water-related resources while transforming the program to meet the challenges of the 21st century.

Civil works projects are designed and operated for commercial navigation, flood risk management, environmental restoration, hydroelectric power, recreation, and municipal and industrial water supply. In addition to these direct federal investments, the Civil Works Program includes an important regulatory mission under the Clean Water Act. The U.S. Army Corps of Engineers (USACE) regulates construction in navigable waters when dredged or fill materials are deposited in waters of the United States, including wetlands. Through our Civil



From left, Assistant Secretary of the Army for Civil Works Jo-Ellen Darcy, Jacksonville District Planning Division Chief Stu Appelbaum, Vice President Joe Biden and then-U.S. Army Corps of Engineers (USACE) South Atlantic Division commander MG Todd Semonite visit the S-356 pump station, a USACE component in the effort to restore Florida's Everglades, in April.

Works missions, USACE also manages production of one quarter of the nation's hydropower and maintains 12,000 miles of commercial inland waterways and nearly 12,000 miles of levees. The challenge is to carry out these missions, balancing the engineering, economy and environment.

Ecosystem Restoration

There has been unprecedented ecosystem restoration progress during the past three years, especially in the Florida Everglades. In August 2009, an agreement between USACE and the South Florida Water Management District (SFWMD) was executed to transform the nature of the USACE/SFWMD partnership and implement the Comprehensive Everglades Restoration Plan and its project to retain water within Everglades National Park.

Climate Change and Sustainability Efforts

In light of the weather patterns of recent years, USACE is including the impact of climate change into planning for specific projects. I serve as a member of the President's Interagency Climate Change Adaptation Task Force, which has released a progress report outlining how the federal government is expanding and strengthening the nation's capacity to better understand, prepare for, and respond to extreme events and other climate change impacts. The report provides an update on building resilience in local communities, safeguarding critical natural resources such as freshwater, and providing accessible climate information and tools to help decision-makers manage climate risks.

***Jo-Ellen Darcy** became the Assistant Secretary of the Army (Civil Works) in August 2009. She establishes policy direction and provides supervision of the Department of the Army functions relating to the U.S. Army Corps of Engineers' Civil Works program. Previously, she was the senior environmental advisor to the Senate Finance Committee and the senior policy advisor to the Senate Environment and Public Works Committee. She has a ...A. from Boston College and a master's degree in resource development from Michigan State University.*

As the senior sustainability officer for the Army Corps o Engineers, I report energy and water sustainability result In support of sustainability goals, we have set a target of 23 percent reduction in greenhouse gas emissions from v hicles and facilities by 2020. Sustainability will be part of a the decisions we make, including the design, constructio and management of military and civil infrastructure. In fi cal year 2012, USACE is investing $10 million in energy an water efficiency.

America's Great Outdoors

We support the administration's America's Great Ou doors initiative by providing recreation opportunities whi protecting and restoring the nation's wetlands and oth ecosystems. With more than 370 million visits per year to i 422 facilities, the Corps of Engineers manages more tha 6,900 miles of land trails that offer opportunities for mou tain biking, hiking, horseback riding and access to boating

Twelve of our military installations have direct access USACE lakes. In fact, more than 50 percent of statesic Army installations are within 59 miles of an USACE lake.

Managing our Aging Infrastructure

Our water resources infrastructure is aging, and the d cline is outpacing reinvestment. The average age of o locks and dams is 60.5 years with a service life of 50 year Unprecedented floods, tornadoes, wildfires and hurrican affect the operations and safety of our infrastructure. Th Civil Works program is orienting its Levee Safety Progra towards a risk framework in which life safety is par mount. We are responsible for about 10 percent of the lev systems in the United States and are currently assessir and classifying the risk.

Disaster preparedness response and recovery are mi

USACE flood area engineers inspect a sandbagged levee during flooding in the Midwest. The Civil Works program is responsible for about 10 percent of the levee systems in the United States, and the USACE Levee Safety Program provides information about the overall condition of the system and recommends actions to reduce flood risk.

sions under USACE Public Law 84-99. In addition, the Federal Emergency Management Agency (FEMA) has identified USACE as the lead Department of Defense agency for the recovery support functions of infrastructure systems. The leveraging of assets promoted by this effort reflects our Army's need for a highly capable force. The USACE team of professionals has experience in worldwide contracting, multidisciplined technical engineering, program and project management, and planning.

Nationally, the Corps of Engineers and FEMA have programs to assist states and communities in reducing flood damages, but the authority to determine how land is used in the floodplains and enforcement of flood-wise practices is entirely the responsibility of state and local governments. At the state level, USACE is part of the interagency Silver Jackets program, a forum in which all flood-risk-relevant agencies come together with the state to collaboratively plan and implement solutions. Teams are active in 33 states, and the goal is to have them in every state.

The U.S. Department of Transportation (DOT) and the Army signed a memorandum of understanding this spring under which the Corps now comments on DOT's proposed TIGER discretionary grants in an effort to streamline and enhance the effectiveness of federal investments in multimodal infrastructure projects. Other agencies have begun contributing to these discussions as well.

* * *

We are establishing priorities for investments that will yield high economic and environmental returns or address a significant risk to public safety and developing innovative and creative ways to use our resources and expertise while continuing to deliver value to our nation. ★

Engineers and climb-team members with USACE Sacramento District, Levi Bowers (foreground) and Christopher Abela inspect floodgates used in dams to control water flow, at New Hogan Dam, California, in April. New Hogan reduces flood risk to the city of Stockton and stores water for irrigation, drinking and hydroelectric power.

LEUPOLD
TACTICAL OPTICS

FOR OUR FREEDOM

OVER A CENTURY OF EXPERIENCE AND A
LIFETIME OF U.S. BASED LIFE CYCLE SUPPORT

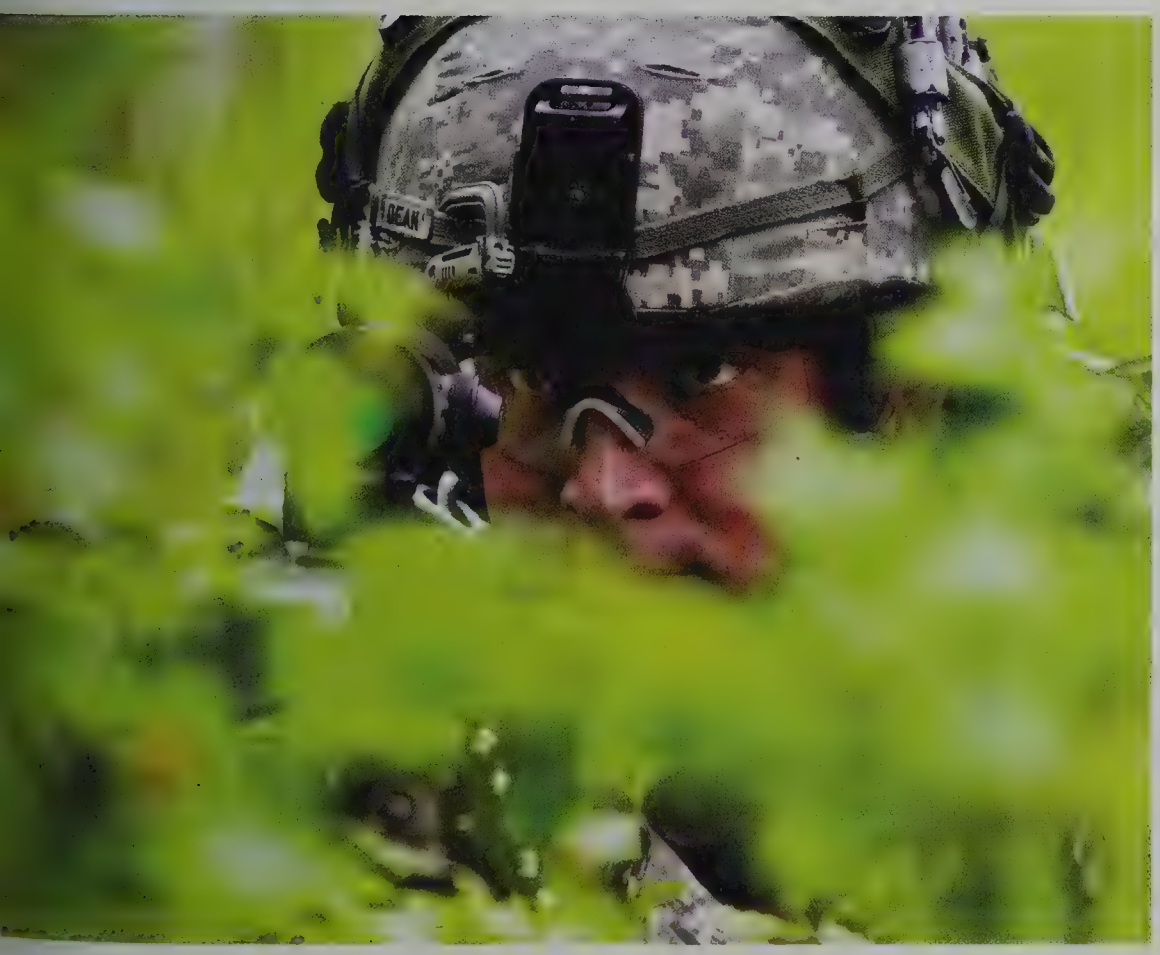
LEUPOLD TACTICAL OPTICS: DESIGNED, MACHINED AND ASSEMBLED IN THE U.S.A.

TACTICALOPTICS@LEUPOLD.COM | WWW.LEUPOLD.COM | PORTLAND, OREGON, U.S.A.
MODERN DAY MARINE #1535 | AUSA ANNUAL CONFERENCE #3803

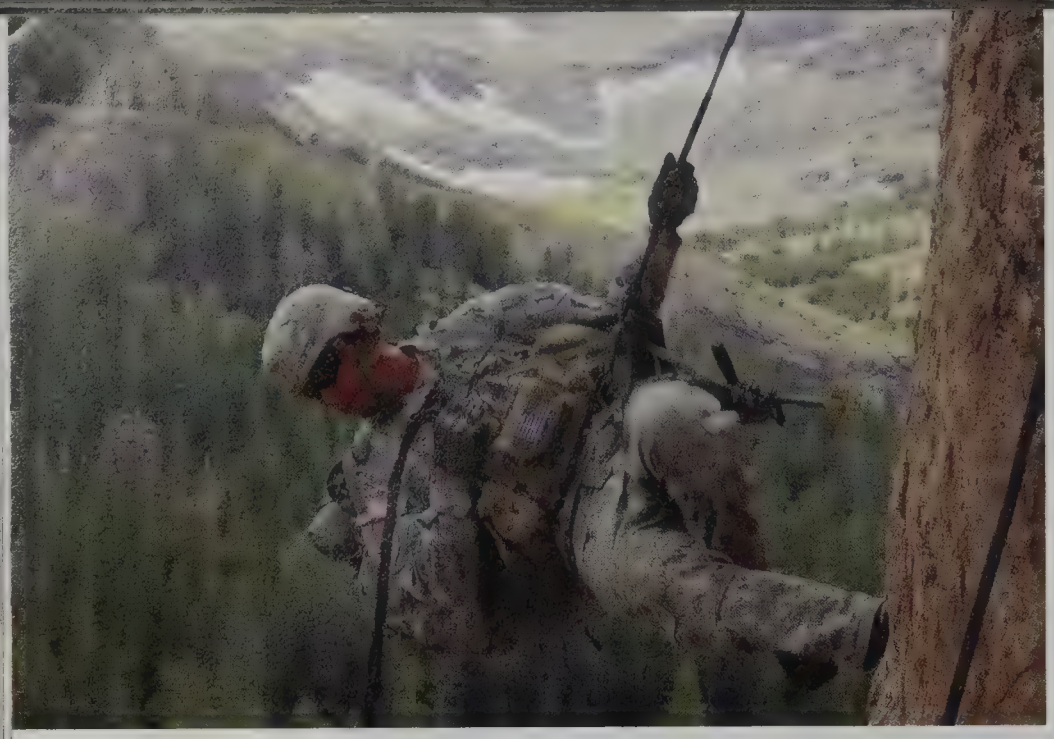
Preparing the Force for Unified Land Operations

By GEN David M. Rodriguez
Commanding General,
U.S. Army Forces Command

The end of fiscal year 2012 marks another year of significant warfighting and transformation achievements for U.S. Army Forces Command (FORSCOM) units. The 287,000 active component (AC) soldiers of the command, in strong partnership with the 358,200 Army National Guard (ARNG) soldiers and 205,000 U.S. Army Reserve (USAR) soldiers, completed the mission in Iraq and added to their tremendous record of success in Afghanistan. This was accomplished while simultaneously working to reach the FORSCOM commander's vision for the command as part of Army 2020.



Operating globally alongside allies and coalition partners, FORSCOM units provide the dominant edge as essential members of the joint team. For 11 years, FORSCOM units and soldiers have



CPL Jose Pacheco, 4th Infantry Brigade Combat Team (BCT), 1st Infantry Division, practices rappelling techniques in Toiyabe National Forest, Calif., during the basic-mobility portion of Mountain Exercise 08-11.

conducted combat operations to counter insurgents, support the nation's allies and coalition partners, and defeat violent extremists. While preparing and deploying units for those operations, FORSCOM continued to provide combat, functional, and multifunctional capabilities for combatant commander theater cooperative-security events, joint exercises and defense support of civil authorities. Always mindful that exceptional performance in combat continues to be the best indicator of readiness, FORSCOM's top priorities remain building readiness in units and fulfilling its responsibilities as the Army's force provider of conventional capabilities to the combatant commanders.

This past year, in support of U.S. Central Command and other combatant commands, FORSCOM prepared and deployed a corps headquarters, two division headquarters, 16 brigade combat teams (BCTs), 11 functional and multifunctional brigade-size formations, and a significant number of battalion task forces. The command also returned units from Iraq as Operation New Dawn came to a successful conclusion in December.

In Afghanistan, FORSCOM units, including BCTs augmented with security force assistance (SFA) capabilities, operate to reduce the capability and will of the insurgency, support the growth in capacity and capability of the Afghan National Security Forces (ANSF), facilitate improvements in governance, and enable economic development. FORSCOM deployed a number of brigade and battalion-size formations for operations in Kosovo, the Sinai, and the Horn of Africa and maintained a BCT as the Army's global response force (GRF) for the nation.

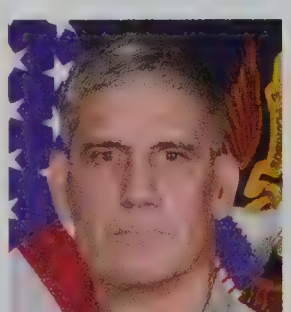
The environment in which our Army operates demands the capability to accomplish the mission while interacting with the local populace and leadership, and teaming with our joint and interagency counterparts. In response to this condition and in accordance with the Army's unified land operations doctrine, FORSCOM is moving quickly to simulate and replicate the training environment—at the combat training centers (CTCs) and at home station—necessary to prepare expeditionary, campaign-focused and tailorable capabilities for future missions.

Given the complexity of conducting unified land operations in such an environment, prudent application of combat power is required to accomplish the mission while protecting the people and preserving the legitimacy of the host government. These conditions, coupled with a compressed force generation rotational cycle, required FORSCOM to develop and resource a unit training strategy designed for counterinsurgency and security force assistance missions. This strategy has proved its effectiveness through the successes achieved in combat.

Even as we continue to build readiness to meet the combatant commanders' requirement for trained-and-ready forces today, however, FORSCOM is planning for the Army of 2020 and preparing for the training demands of tomorrow. This includes continuing development of a balanced training strategy among the CTCs, home station and joint exercises; enhancing home station training enablers incorporating live, virtual, constructive and gaming domains; routinely integrating special operations forces into our training; and institutionalizing how we include joint, interagency, intergovernmental, and multinational (JIIM) capabilities as part of training events at brigade level and above. Critical to achieving our vision for a balanced training strategy is modernizing the two CTCs in the continental United States: the National Training Center (NTC) at Fort Irwin, Calif., and the Joint Readiness Training Center (JRTC) at Fort Polk, La.

Though the recapitalization and institutional effort to upgrade our training capabilities will require a period of years to complete, we are moving forward today with the necessary improvements and major events that prepare FORSCOM units to conduct the full range of military operations as part of the joint team. Examples include: unified land operations training rotations in October and November at the JRTC and NTC to ready BCTs for a Central Command theater reserve mission; preparing the continental U.S.-based GRF for its worldwide contingency mission, including joint forcible entry; exercising select regionally ap

---



***GEN David M. Rodriguez** is the commanding general of U.S. Army Forces Command. Previously, he was the commander of the International Security Assistance Force Joint Command and deputy commander, U.S. Forces-Afghanistan. He has extensive combat and command experience at every level. His Army and joint staff experience includes senior military assistant to the Secretary of Defense; joint staff deputy director, Regional Operations (J3); and deputy commanding general/assistant commandant, U.S. Army Infantry Center and School. A graduate of the U.S. Military Academy, GEN Rodriguez has master's degrees in national security and strategic studies from the U.S. Naval War College and in military art and science from the U.S. Army Command and General Staff College*

Our business is making the finest
ballistic protection systems in the industry.
Our mission is saving lives.
SIZE LARGE
STRIKE FACE
HANDLE WITH CARE
SIZE MEDIUM
STRIKE FACE
HANDLE WITH CARE
DEFENDER ™ multi-hit body armor ceramic plates along with the Seamless Ballistic Helmet (SBH) provide proven performance and lifesaving ballistic protection for alliance warfighters around the world.
ceradyne, inc.
ARMOR SYSTEMS
DEFENDER
www.ceradyne.com/products/defense.aspx

Preparing for spring deployment to Afghanistan, PFC Shari Crump (center) 1st BCT, 82nd Airborne Division, listens to a convoy brief by her platoon leader before a resupply mission at the Joint Readiness Training Center, Fort Polk, La., in January.

portioned units and our NATO Response Force (NRF) units; and expanding training areas at Fort Irwin and Fort Polk through a successful land acquisition effort.

The regionally aligned forces initiative provides a means for corps headquarters, division headquarters and brigade formations that are designated as regionally aligned units to plan training optimized for a specific combatant commander's geographical area. Once aligned, the brigade will train for the full range of military operations during the first part of the training and readiness phase of the Force Generation model. Upon completing this training, the brigade will then focus on preparing for specific operational plans and, if required by the combatant commander, participate in joint exercises or engage in other theater security-cooperation events. The regional alignment approach also enables the regionally aligned forces unit to train its soldiers in language, culture and specific threat capabilities.

Another important training initiative undertaken to meet the requirements of Operation Enduring Freedom (OEF) during the past year is security force assistance (SFA) teams organized for augmentation of BCTs. FORSCOM has use training capabilities in First Army, headquartered at Roc Island Arsenal, Ill.; the 162nd Infantry Brigade at Fort Polk and the CTCs to prepare SFA teams for this very importar mission. These teams bring crucial expertise to the OE mission and illustrate the flexibility of FORSCOM trainin capabilities and organizations. Our BCTs, augmented wit SFA teams, are accomplishing the fundamental mission c training and supporting the growing capacity of th Afghan national army and Afghan national police.

To meet the combatant commanders' requirements to pre pare and deploy allocated units and train regionally aligne units, FORSCOM is working in close coordination with th Department of the Army to continue refining the Arm Force Generation process. This effo incorporates the realities of post-OE requirements in Central Command, ac commodates the Army's importar role in the nation's pivot to the Pacifi defense strategy, and recognizes tha the Army requires both ARNG an USAR capabilities to meet combatar commanders' requests for forces an the fiscal necessity to optimize read ness at best value. With 71 percent c the Army's multifunctional suppo brigades and 74 percent of functiona support brigades in the ARNG an USAR, we must continue to rely on proportional contribution from both c these components, each of which is vital national asset.

One of FORSCOM's principal re sponsibilities is to provide trainin and readiness oversight of the ARNG and USAR during premobilizatior Following mobilization, FORSCOM i

Paratroopers with 82nd Airborne's 1st BCT, Devil Brigade, exit a C-17 Globemaster III during a training exercise at Fort Bragg, N.C. The yellow cord, called a static line, deploys each paratrooper's parachute automatically—important because the soldiers are jumping at only 800 feet above ground level.

responsible for executing reserve component units' post-mobilization training. Execution of this training support, in close collaboration with the ARNG or USAR unit, is planned and executed by First Army at one of five mobilization installations: Camp Shelby, Miss.; Camp Atterbury, Ind.; Fort Hood, Texas; Fort Bliss, Texas; and Joint Base McGuire-Dix-Lakehurst, N.J.

The 2012 summer reserve component annual training season marked the beginning of the shift from a predominantly OEF focus to a broader training strategy for the Army's reserve component formations. In support of this shift, First Army provides training support to both ARNG and USAR units. The ARNG's Exportable Combat Training Center event provides battle-staff training coupled with a mission-focused training event to certify platoon-level proficiency before a unit becomes available for its programmed mission year. The USAR's Warrior Exercise, a multifunction, multi-echelon event that incorporates live, virtual, constructive and gaming domains, features company-level training supported with observers, coaches and trainers. The USAR's Combat Support Training Exercise trains brigade and battalion staffs linked with live company-level training. These training events, conducted premobilization, are important elements in the reserve component training strategies with the aim of building and sustaining readiness premobilization while reducing the time needed to train during the postmobilization period.

For AC units, home station training is one of the components of our balanced training strategy. While it is essential for deploying or contingency BCTs and their enabling capabilities to undergo a culminating training exercise at either the NTC or JRTC, the prerequisites completed at home station set the conditions for achieving maximum readiness. To accomplish this, FORSCOM is developing the optimal environment at home station to train for unified land operations. This requires the Army to complete modernization of training enablers, determine how we can approximate the 21st-century threat, and incorporate elements of joint, interagency, intergovernmental and multinational functions into training events.

SGT Vincent Mennell, a combat engineer with 2nd BCT, 101st Airborne Division (Air Assault) fires the M26 Modular Accessory Shotgun System at Fort Campbell, Ky. The unit is the first in the Army to have been issued the weapon.

The last component of our balanced training strategy is participation in regional or theater security-cooperation activities within the geographical combatant commanders' area of responsibility. Related to the regionally aligned forces concept, joint and combined exercises and theater security-cooperation events provide a means through which FORSCOM commanders can prepare their units for accomplishing missions in today's complex environment while supporting the combatant commanders' and joint staff's strategic goals. In this way, FORSCOM commanders can build readiness at best value, ensure their formations train in an interconnected operational environment that reflects the complexities of 21st-century warfare, and provide the opportunity for their leaders and soldiers to work with JIIM enablers in order to develop integrated, flexible and supporting capabilities.

The men and women who defend our great nation and the families that support them remain America's most valuable assets. They remain resilient beyond every possible expectation. While many challenges remain, our effort ensures that the Army will continue to provide the world's best-led, trained and ready soldiers, supported by caring families, to accomplish the mission in support of the combatant commanders.

The soldiers of FORSCOM remain Freedom's Guardian. ★

SPC Phillip Marsh, a mechanic assigned to 1st Air Cavalry Brigade, 1st Cavalry Division, receives a brief about media interaction during a situational training exercise at Camp Marmal, Afghanistan.

"By failing to prepare,
you are preparing to fail."

Benjamin Franklin

UNSTABILIZED GUNNERY

Thousands of unstabilized crews require live fire qualification.
Our trainers will ensure their success when they get there!

INDIVIDUAL

.50 Cal & MK-19
Individual Gunnery Trainer™ (IGT™)

- Curriculum developed in accordance with CPP and HBCT gunnery standards
- Interactive synthetic crewmembers
- Virtual immersion using voice recognition
- Immediate individual performance analysis
- Synthetic instructor, self-paced curriculum

CREW/SECTION

Unstabilized Gunnery Trainer™ (UGT™)

- Curriculum developed in accordance with CPP and HBCT gunnery standards
- Instructor/Operator-applied training
- Trains and sustains crew gunnery skills
- Minimum proficiency level progression
- Driver, Gunner, Commander train together
- Meets live-fire prerequisites

Modular, transportable, low cost training capability incorporating Army approved gunnery doctrine.

RAYDON

WWW.RAYDON.COM | 386.267.2936

[illegible] Corporation. All Rights Reserved

TRADOC:
Leading the Transition

By GEN Robert W. Cone
Commanding General,
U.S. Army Training and Doctrine Command

As our Army draws down from more than a decade of war, we at the U.S. Army Training and Doctrine Command (TRADOC) are turning our attention towards the challenges and opportunities the United States faces in the next two decades. Although a decade of combat is ending, the Army's operational tempo will likely remain high. Our Army will remain engaged in combating terrorism, providing humanitarian assistance, maintaining homeland defense and building the capacity of our international partners. Simultaneously, the Army's role as part of the Department of Defense's strategy of sustaining U.S. global leadership means we must always stand ready to defeat any state, non-state, or hybrid threat to the United States or its vital interests. TRADOC's mission is ensuring that the Army confronts these challenges with the

Training and Doctrine Command is making all new doctrinal publications web-based, accessible via mobile devices and easily updated.

best-trained and most capable soldiers in the world while also making certain our Army goes forward with the right structure and appropriate doctrine. In short, when our nation calls we must be confident that our Army is ready.

This transition will not be easy, as it is taking place during a period of rapid global change and with the full expectation that we face years of constrained resourcing ahead. I am confident, however, that the best Army this nation has ever fielded—soldiers who have been victorious on hundreds of battlefields in the past decade—will meet and overcome all future challenges with the same spirit and confidence demonstrated in the trying years behind us.

As the only Army organization positioned to integrate every aspect of the Army's transition, TRADOC is looking to the future even as it maintains its top priority of supporting the current fight. By improving our institutional focus on the tenets of the Army profession and by continuing to redesign training, education and leader development initiatives, TRADOC has already begun moving forward with programs that are shaping the soldiers of 2020—the human transition. Moreover, as the "architect of the fu ture," TRADOC is developing and integratin the concepts, organizations and materiel the fu ture force requires—the structural transition Even as we look to the future, though, a larg portion of TRADOC's focus remains fixed o the present. We understand that executing th transition to the Army of 2020 cannot add t the risks confronted by the current force, espe cially those still engaged in overseas contin gency operations. TRADOC is, therefore, devel oping the capabilities required for the futur force, while remaining adaptive and responsiv to the nation's and Army's immediate needs.

Adaptable and Efficient

During the last decade, TRADOC repeatedl demonstrated its adaptability and efficiency b reducing military manpower, expanding capac ity and reorganizing for greater performanc while continuing to innovate. For instance, t help meet the Army's rapid expansion requirements post 9/11, TRADOC transferred more than 6,000 soldiers to th operating force, replacing them with civilians. Despite larg reductions in military manpower, TRADOC increased its an nual training and education load by more than 200,000 while simultaneously meeting significantly increased collec tive training requirements in support of deploying brigades Since then, there has been no letup in the operational tempo In fiscal year (FY) 2012, TRADOC trained more than 700,00 soldiers and deployed 1,312 mobile training teams. Sinc 2003, TRADOC has remained at the forefront of the Army' adaptation to the threats soldiers face in combat, making ma jor changes to soldier initial military training as well as nor commissioned officer (NCO) and officer professional mili tary education.

Such continuing adaptation of the Army's training and ed ucation systems, while simultaneously supporting currer contingencies, remains crucial to combat success and re mains TRADOC's priority. Maintaining this support, how ever, as well as our capability to expand the Army rapidl for future contingencies, suggests the need to reassign mil tary personnel back to the institutional Army.

While the Army rebalances its resources, TRADOC i moving out to confront and master the changing enviror ment, thereby ensuring our Army's ability to seize opportu nities and overcome any potential threat on the horizor For instance, TRADOC has already led the conceptua change from battle command to the more appropriate Mis sion Command—a concept whereby commanders accom plish missions across the full range of military operation through the disciplined initiative of subordinates operatin within the structure of the commander's intent. To assist i the defining and promulgating of Mission Command con cepts, we have established the Mission Command Center c Excellence at Fort Leavenworth, Kan. This center is taske to fully realize the potential power of Mission Comman

GEN Robert W. Cone *is the commanding general, U.S. Army Training and Doctrine Command, Joint Base Langley-Eustis, Va. Before that he served as commander, III Corps and Fort Hood, Texas, and deputy commanding general-operations for U.S. Forces-Iraq. GEN Cone also commanded the National Training Center at Fort Irwin, Calif., and has served in command and joint staff positions in Iraq and Afghanistan as part of Operation Iraqi Freedom and Operation Enduring Freedom. A graduate of the U.S. Military Academy, where he was commissioned as an Armor officer, he holds master's degrees in sociology from the University of Texas at Austin and in national security and strategic studies from the Naval War College.*

RELIABILITY. WHEN IT COUNTS.

Curtiss-Wright technology delivers reliability. In the field, under fire. When it counts the most. From tanks to troop carriers you'll find our technological innovation and engineering strength at work. Curtiss-Wright quality ensures the performance and confidence the mobile warfighter earns and deserves to get the job done.

From turret to track, and sensor to shooter, Curtiss-Wright products keep ground combat vehicles in the fight to meet their missions head on. From VICTORY-ready rugged computers, network switches, and data recorders to highly engineered auto-loaders, turret drive and stabilization systems, hydraulic pumps, motors and manifolds we supply battle-tested engineered components and solutions.

When you need a trusted partner you can count on for the most demanding missions, turn to us. We'll get you there and back.

To find out how, visit:
www.cwcontrols.com

www.cwcontrols.com

CURTISS WRIGHT Controls

Visit us in Booth #7049 at AUSA Annual 2012

across the combined arms maneuver force by 2020. Other centers of excellence (COE), such as the Maneuver COE at Fort Benning, Ga., which combines the infantry and armor centers, are cost-effectively integrating and enhancing the capabilities of branches with interdependent and reinforcing roles and functions.

The Human Transition

The principles underpinning the Army profession are the foundation of the human transition of the Army of 2020. In our first Army Profession Report, issued in April, we examined these precepts in detail. This report is the most comprehensive study ever conducted on the Army profession, with more than 40,000 respondents from all cohorts across the Army. We asked our young warfighters what needed attention, and they told us: Enforce our standards and values, and integrate more Army culture into our unit activities. This report provides the basic framework for ensuring that the best Army this nation has ever fielded remains the preeminent military force of the 21st century. The report also makes clear that achieving this goal requires that the Army get the human side of our transition right, something TRADOC is doing by capitalizing on the strengths and dedication of America's soldiers.

Training and educating our junior ranks, however, are not sufficient to ensure future success. We must also prepare our current crop of officers and NCOs for the responsibilities and complex challenges of senior leadership. This means increasing broadening opportunities such as civilian graduate school, fellowships and scholarships to create strategic leaders with experiences outside of tactical units. We must take our leaders out of their comfort zones. We should challenge them with new and different ideas and immerse them in other cultures so that they are prepared to operate in the joint, interagency, intergovernmental and multinational environments of the future.

TRADOC is preparing the institutional changes for managing the Army's current talent better. We are expanding beyond just managing the very best to include more precise management of the vast pool of other talented officers and NCOs. For mid-grade officers, the Army is preparing to institute a selection process for the U.S. Army Command and General Staff College (CGSC). The Army has also largely returned to two-year battalion and brigade command tours. This change provides many officers with an opportunity for senior command experience, while ensuring the continuity required for creating effective units. As we do this, TRADOC is also adapting distance-learning programs so that those who are not resident CGSC students receive the education required for future service and advancement.

Another critical component of the human transition is developing the broad concepts from which Army doctrine flows. We reinvigorated this process in TRADOC by republishing *The Army Capstone Concept* and *The United States Army Operating Concept* this year. Their publication initiates a development cycle that renews all Army concepts every two years.

To ensure that doctrine remains relevant and effective in the future, TRADOC initiated the Doctrine 2015 campaign. This initiative, which completed delivery of the 29 foundational manuals in August, is developing and delivering concise, relevant and adaptable doctrine to the field. Doctrine 2015 is not, however, a top-to-bottom directive. Instead, we enlisted our superb warfighters to supply their creative contributions and combat lessons learned to ensure our doctrine remains effective and relevant.

Our goal is to provide relevant doctrine to the field in a timely manner so that soldiers never again think it necessary to search outside the Army's resident body of professional knowledge on uncertified websites. To accomplish this, TRADOC is partnering with the operating force and assembling the foremost experts across the Army, who bring with them years of warfighting experience. By using these experienced soldiers to update old doctrine and create new doctrine, TRADOC is demonstrating commitment to using uniformed members to maintain our unique body of professional knowledge.

Doctrine 2015 starts with the foundational Army Doctrinal Publications (ADP), led by ADP 3-0 *Unified Land Operations*, which provides the Army's immutable principles for the conduct of decisive action across the range of military operations. A limited number of more detailed Army doctrinal reference publications enable these foundational pub-

Soldiers can enhance their individual and collective skills with virtual training, which exposes them to a variety of scenarios in a short amount of time.

BECAUSE IT'S NOT JUST YOUR JOB, IT'S YOUR LIFE.

Enhanced perception & awareness can save lives. FLIR continues to pioneer innovative search & rescue sensor systems that enable you to see the unseen. When lives are at stake you need clear, accurate information you can trust.

FLIR®

IR.com/gs

LIR System

lications. Each of these documents is easily comprehensible so that every soldier is operating on the same understanding of current doctrine. They are all of manageable size, present information as concisely as possible, and are easily updatable. Finally, TRADOC is making all new doctrinal publications web-based and accessible via mobile devices, and will support them with wiki-like collaborative products that allow rapid updates based on lessons from the field.

We realize that the classroom and training experiences of the past cannot further enhance our Army of combat-experienced professionals; with that in mind, TRADOC is making changes designed to capture the imagination of this generation's combat leaders. Rather than the continued use of fictitious scenarios and threats in our training, we are exciting leaders through the regional alignment of units so that they can concentrate their training on preparing for operations in a real environment. As part of this process, creative leaders are again designing and developing their own training based on years of personal combat experience. The Training Brain Operations Center supports their efforts by assimilating real-world data into scenarios for training and designed more than 71 training scenarios this year.

Much of the Army's success over the last decade is the result of the tremendous leadership demonstrated by our officers and NCOs. In upcoming years, however, as we conclude combat operations in Afghanistan, we will rapidly lose that combat experience in the junior grades. By 2020, only the senior officers and NCOs in a battalion will likely have combat experience. Leaders must therefore design and execute training and educational events so that experienced soldiers are able to coach, teach and mentor those who have not seen combat.

Adapting Army Learning

- Courses with a focus on collaborative, problem-centered experiences rather than instructor-centered lectures.
- Learning tailored to the individual's experience and competence level.
- Career-long learning at the point of need.
- Soldier-created content (wikis, applications).
- Advanced civil schooling opportunities for instructors before teaching.
- Civilian university partnerships.
- Professional certification.
- Expanded 22-day Warrior Leaders Course.

In the institutional domain, the Army learning model is changing our approach to Army education. It provides context-based, collaborative, problem-centered education well suited to today's experienced leaders and soldiers. As we shape institutional training, TRADOC is also deliberately transferring hard-won battlefield knowledge to those new soldiers and officers who join the force over the next few years.

Mission-Focused Training

- Return ownership to unit commanders.
- Real-world scenarios driven by the regional alignment of units.
- Integrated training environment blending live, virtual and constructive training.
- Integrating the human aspects of complex environments (culture, language, capacity building, information and influence).
- Mission focused—Mission Command across the range of military operations.
- Master transitions.
- Combat training center-like experience at home station.

In addition, TRADOC is fostering groundbreaking initia tives in training by developing combat training center-lik training environments at units' home stations and throug the networked blending of live, virtual and constructiv training events. These innovations, coupled with regiona alignment of units, will provide soldiers and leaders wit relevant, challenging and effective home-station training. B focusing on learning at the point of need and the implemer tation of digital training applications, TRADOC is leadin the way to a significantly improved training experience fc the Army of 2020.

The Structural Transition

TRADOC remains uniquely positioned to lead th Army's transition—from strategy formulation to concep and requirements development to capabilities integratior structural design, and assessment. Such end-to-end integra tion remains crucial in creating an Army ready to meet th dangerous challenges of an uncertain future. In this regarc we have already revised the Army Capstone Concept an the Army Operating Concept to integrate them with nev defense strategic guidance and the capstone concept fc joint operations. In doing so, TRADOC has supplied th fundamental ideas necessary for the completion of the Joir Operational Access Concept (JOAC). Presently, the JOAC i designed to get American forces into a zone of conflict bu still seeks to answer the big "so what" question: What do w do once we get there? The Gain and Maintain Access Cor cept, developed with the Marines, answers the first part c that question by describing how we will establish contac The Army's unified land operations doctrine, which detail how the Army as part of a joint force will meet national ob jectives once access is gained, covers Army actions afte making contact. Throughout history, getting ashore wa only the first step in meeting national policy goals. Fina success has always rested on the U.S. military's capabilit to defeat the enemy once we have arrived. It is also wort noting that no war was ever won by air or sea operation alone. Such decisive actions have always been, and will a ways remain, the province of landpower.

Even in an increasingly resource-constrained environment, the Army must remain capable of providing the essential element of success. We must act intelligently as we reduce the force and build the future Army we need, without reducing that force's effectiveness. Such structuring activities remain TRADOC's foremost concern, and our solutions incorporate much of what we have learned during this last decade of combat. For instance, although it is clear that the modular approach and the resulting increase in brigade combat teams (BCTs) provided strategic flexibility, the loss of a combat battalion in each modular BCT was not an optimal trade-off. As a result, we are examining adding a maneuver battalion to each Infantry and Armored BCT (along with critical enablers) even at the cost of reducing the number of BCTs.

In short, we are not going to cut in a way that breaks the force. Rather, we are building using an investment approach so that we can rapidly expand if called upon to do so. TRADOC will execute the Army's structural transition so that we end up with more capable and more tailorable forces than we have today.

Another important initiative is the Agile Capabilities Lifecycle Process, which transforms how the Army acquires and fields equipment. This process uses a series of soldier-led, semi-annual operational "evaluations of systems" to find effective solutions for operational gaps in the interest of rapidly getting crucial equipment to the warfighter. Through this agile process, the Army is capitalizing on technological advances and accelerating network modernization to speeds far exceeding traditional acquisition strategies. Crucially, during this period of constrained resources, agile acquisition processes have already saved the Army nearly $6 billion.

This effort is led by the Brigade Modernization Command (BMC), reinforced through a partnership with the U.S. Army Forces Command, which is providing the 2nd BCT from 1st Armored Division, and ensures that combat-experienced operators and units have input into the process. The BMC is also working with the Army Test and Evaluation Command and Assistant Secretary of the Army for Acquisition, Logistics and Technology to integrate and assess further emerging capabilities. Through such partnerships and the input of soldiers in the field, the BMC is providing the integral link for the Army's adaptation and modernization efforts. It has become the crucial capability necessary to guarantee that future BCTs can decisively accomplish any assigned mission.

Agile Capabilities Lifecycle Process

- Allowed the Army to restructure programs, terminate others and reallocate resources, already providing a cost savings of more than $6 billion.
- Brings together industry, testers, developers and soldiers in a field environment early and often in the process.
- Adaptive and integrated Network Integration Evaluation (NIE) of capabilities semi-annually.
- Conducted NIE 12.2 in spring of 2012.
- NIE 12.2 validated the baseline for Capability Set 13, which will be fielded to eight BCTs starting in October 2012.
- NIE 12.2 evaluated three Systems Under Test and 36 government and industry Systems Under Evaluation, including Warfighter Information Network-Tactical Increment 2, Joint Enterprise Network Management and Joint Tactical Radio System.

TRADOC Support to the Joint Force

Even as we become the Army of 2020, we continue supporting the other services and the joint force. Through TRADOC, the Army provides critical training and education to all of the services. Last year, for instance, TRADOC trained more than 46,000 servicemembers from other services. As the joint force adapts to execute the emerging DoD strategy, TRADOC provides the joint force far more than just training support. We are also taking the lead in coordinating with joint agencies and other services for the identification and integration of jointly required capabilities. TRADOC's integration with joint wargaming, concept development and experimentation ensures that emerging Army capabilities support the joint force and the other services' capabilities meet the Army's requirements. TRADOC's support to the joint force remains essential to achieving the necessary capabilities for future success.

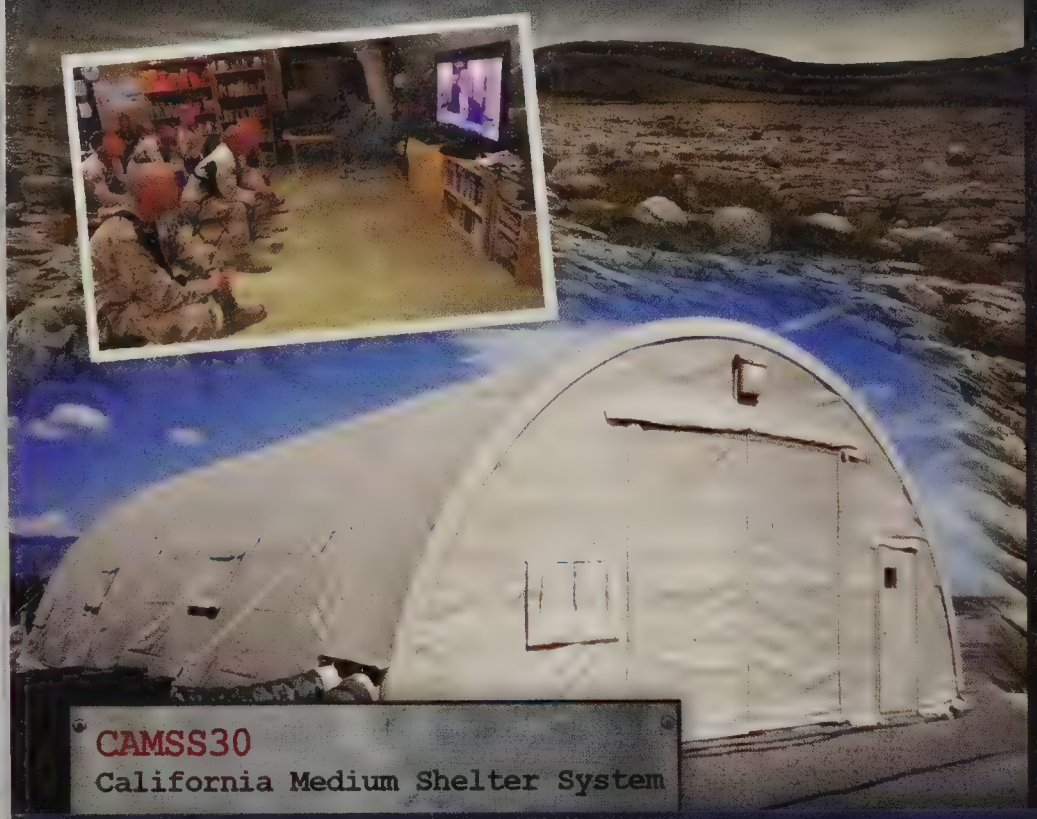
The Way Ahead to Shape the Army of 2020

Making the transition to the Army of 2020, while simultaneously confronting an array of global challenges, requires the military to carefully manage and solve complex problems. In the past, TRADOC has repeatedly demonstrated its ability to develop innovative and effective solutions for meeting such challenges. It must—and will—continue to do so in the future.

The way ahead for TRADOC and the Army includes the integration of crucial capabilities created for the counterinsurgency campaigns during the last decade. The 2011 integration of the Asymmetric Warfare Group (AWG) into TRADOC is an example of this process. As the crown jewel for operational adaptability, AWG assists TRADOC and the Army in studying emerging battlefield threats and helps deliver solutions that prepare us for the next war zone even before conflict erupts. Through its interaction with each of the combatant commands and its immersion in regions around the globe, the AWG serves as TRADOC's global scouts, enabling us to drive change throughout the Army.

Transitioning from more than a decade of large-scale combat in Iraq and Afghanistan to the Army of 2020, postured to operate in complex environments anywhere around the globe, promises to be a challenge second only to combat. TRADOC will remain the dynamic force pushing this transition as well as the central organization shaping the Army of the future. ★

COMPLETE SHELTER SOLUTIONS



CAMSS30
California Medium Shelter System

CAMSS20Q
Small Shelter Syste

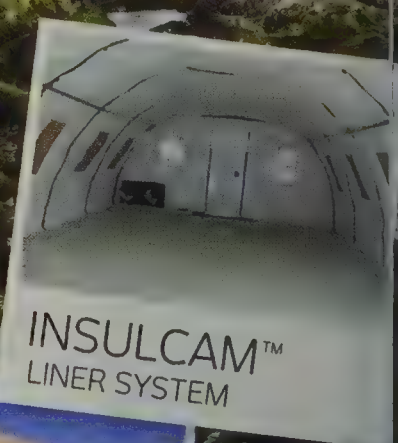
WORLD LEADER IN DESIGN & MANUFACTURE OF PORTABLE SHELTER SYSTEMS FOR RAPID WORLD WIDE DEPLOYMENT

CAMSS40EX
Vehicle Maintenance Shelter

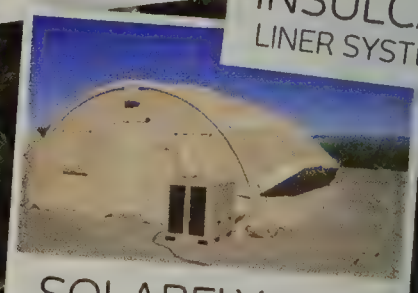
ENERGY SAVINGS PRODUCTS

Tested & Proven to reduce power consumption by 50%

THERMACAM™
SHELTER SYSTEM



INSULCAM™
LINER SYSTEM



SOLARFLY

CAMSS SHELTERS

· TRIED AND TRUE ·™

800 984 7678 | WWW.CAMSS.COM

shelters@camss.com AVAILABLE ON GSA AND DL

U.S. Army Materiel Command

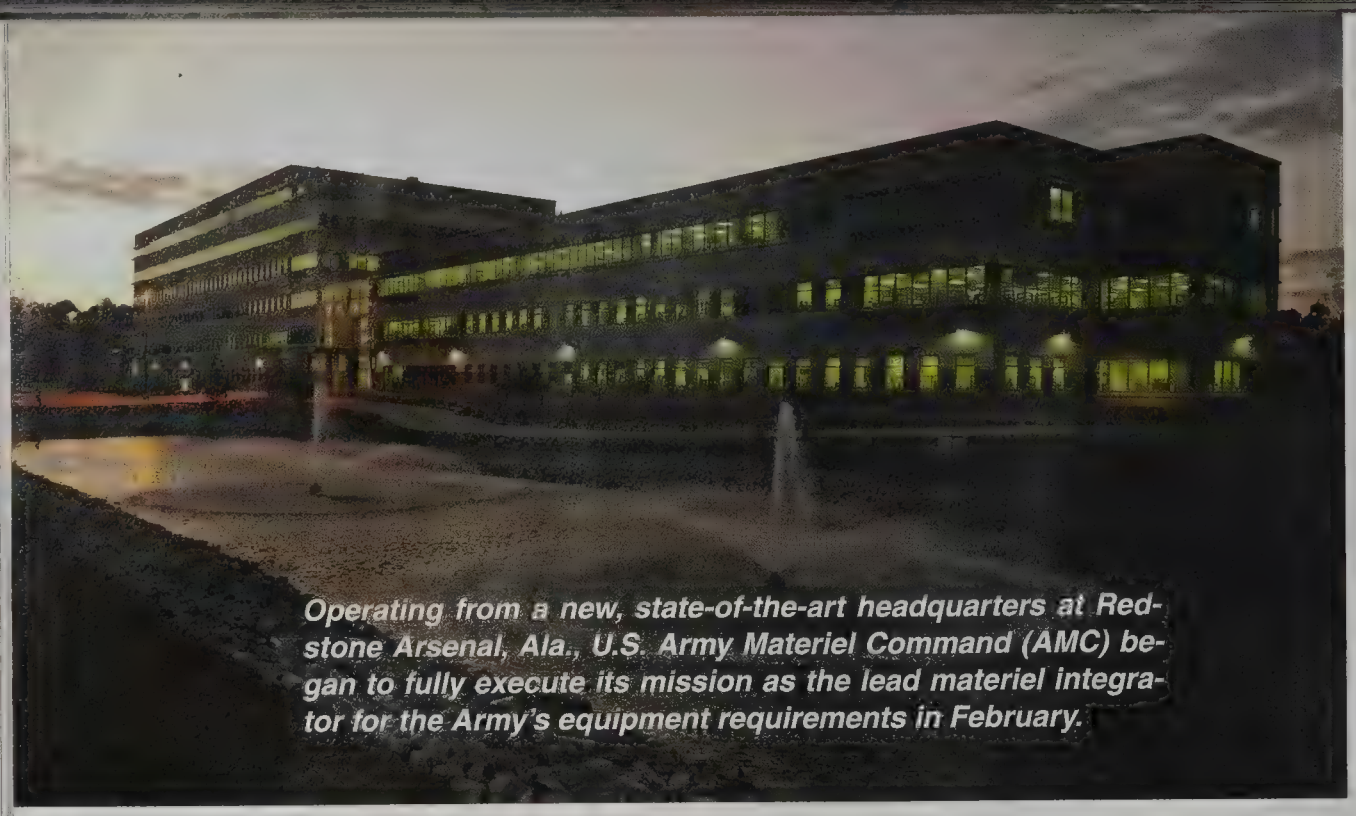
Sustaining the Decisive Edge For the Army and Joint Force 2020

By LTG Dennis L. Via
Commanding General,
U.S. Army Materiel Command

Aside from war, there is no greater challenge for an Army than change. As we begin to emerge from a decade of conflict, today's Army confronts an era of rapid, sustained and dramatic change. Evolving threats, advancing technologies and reduced resources mean our future will remain every bit as challenging as the recent past.

In the words of Secretary of Defense Leon E. Panetta, we are at a "strategic turning point" that will require us to shape and equip a force that is smaller, leaner and more agile. It will be a force that emphasizes the Asia-Pacific and Middle East regions, while retaining its ability to support a broad spectrum of missions and contingencies around the globe.

To navigate the critical path ahead, the Department of Defense issued a



Operating from a new, state-of-the-art headquarters at Redstone Arsenal, Ala., U.S. Army Materiel Command (AMC) began to fully execute its mission as the lead materiel integrator for the Army's equipment requirements in February.

new strategy that reflects our changing operating environment, along with revised budget priorities to support that strategy. In support of this new approach, Army Chief of Staff, GEN Raymond T. Odierno, also issued his marching orders to ensure the Army remains the nation's force of decisive action, able to provide responsive landpower for the Joint Force of 2020.

A Globally Networked Logistics Command

After a decade of war, Army Materiel Command (AMC) has transformed how our Army supports the materiel needs of our joint warfighters. In the process, AMC has become a globally networked logistics command and now operates from a new state-of-the-art headquarters at Redstone Arsenal, Ala. For the first time, AMC has real-time asset visibility of virtually every piece of Army equipment in order to sustain combat power and build unit readiness.

From research and development to contracting, acquisition and manufacturing, from supply and distribution to sustainment and resale, AMC touches every phase of the materiel life cycle and is the Army's chief supporter of the DoD global supply chain. We began to fully execute our mission as the lead materiel integrator (LMI) for the Army's equipment requirements in February, about one year after the Secretary of the Army assigned AMC this important role. A revolutionary approach to logistics, LMI allows AMC to provide comprehensive materiel management and real-time readiness for our forces. For example, through LMI we've been able to develop materiel distribution plans for units in Afghanistan in hours rather than the weeks and months it often took in the past.

As the Army's "center of gravity" for global materiel management, AMC can quickly match resources with the evolving requirements of our Army and our combatant commanders. This allows us to engage in predictive logistics, which provides our warfighters the flexibility they need to conduct missions in an increasingly complex and uncertain environment.

A National Economic, Scientific And Industrial Resource

With an impact or presence in all 50 states, AMC generated more than $179 billion in economic activity in 2011 alone. As a result, AMC is postured not only to sustain the materiel requirements of the Joint Force but also to serve as a true national resource for the nation's economy and the defense industrial base.

We are also a leader in our nation's scientific, research and technology efforts. Army Materiel Command's Research, Development and Engineering Command manages an annual research and development budget of more than $6 billion and is a leader in basic scientific research areas such as nanotechnology, armor, robotics, fuel-efficient vehicles and simulation. AMC bridges the state of the art with the art of the possible in developing applied technologies such as lifesaving medical advancements and vital energy-efficiency initiatives like high-energy batteries and microgrids. These research efforts pay dividends for both warfighters and our citizens at home. They are complemented by our international technology centers and research and development collaborations with industry, academia and our international partners.

Support to the Joint Warfighter

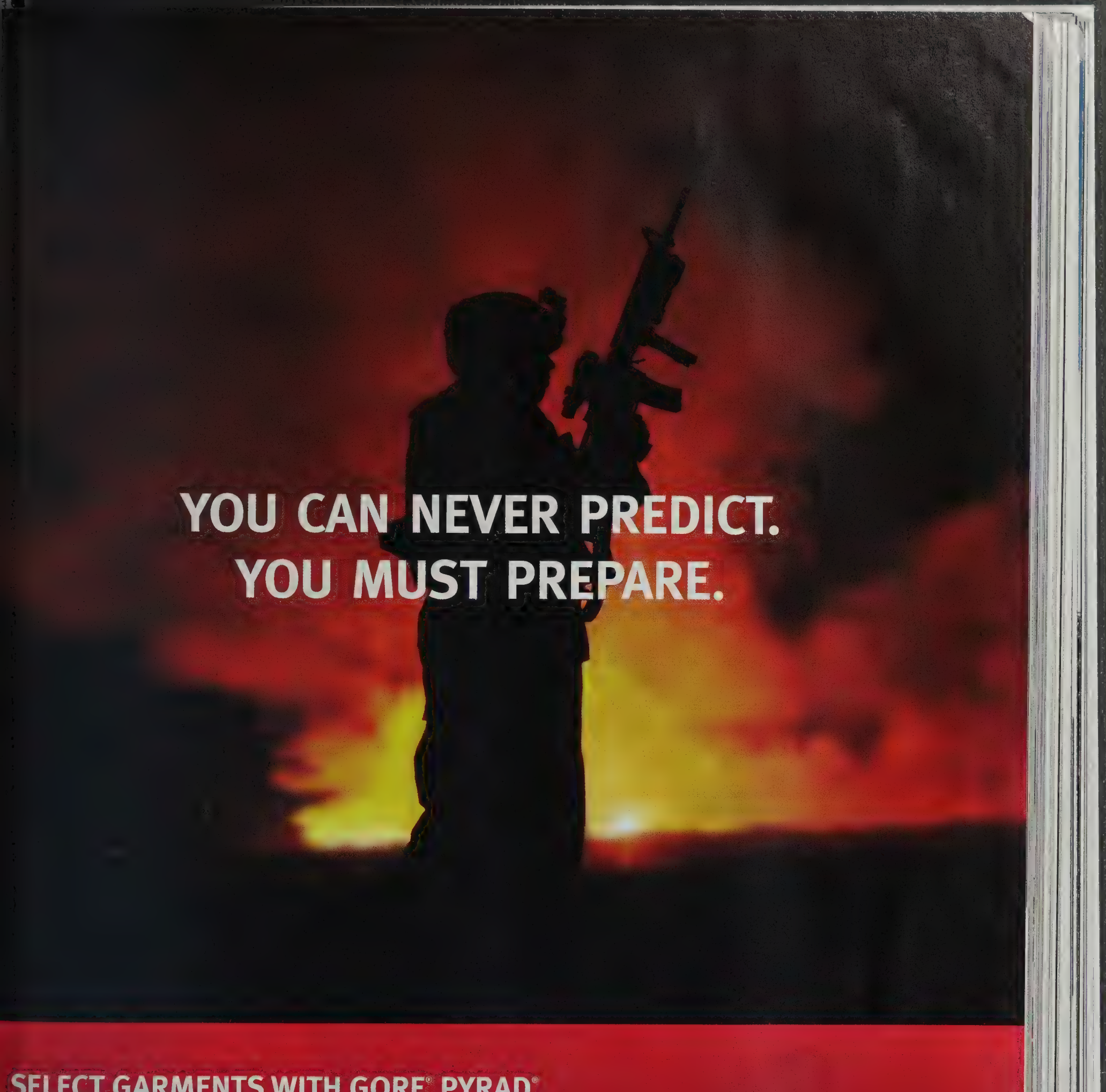
When we think of joint warfighting, we usually think in terms of combatant commands, joint headquarters or joint task forces. In AMC's case, while we are an Army command, our capabilities and the global support we provide are truly joint.

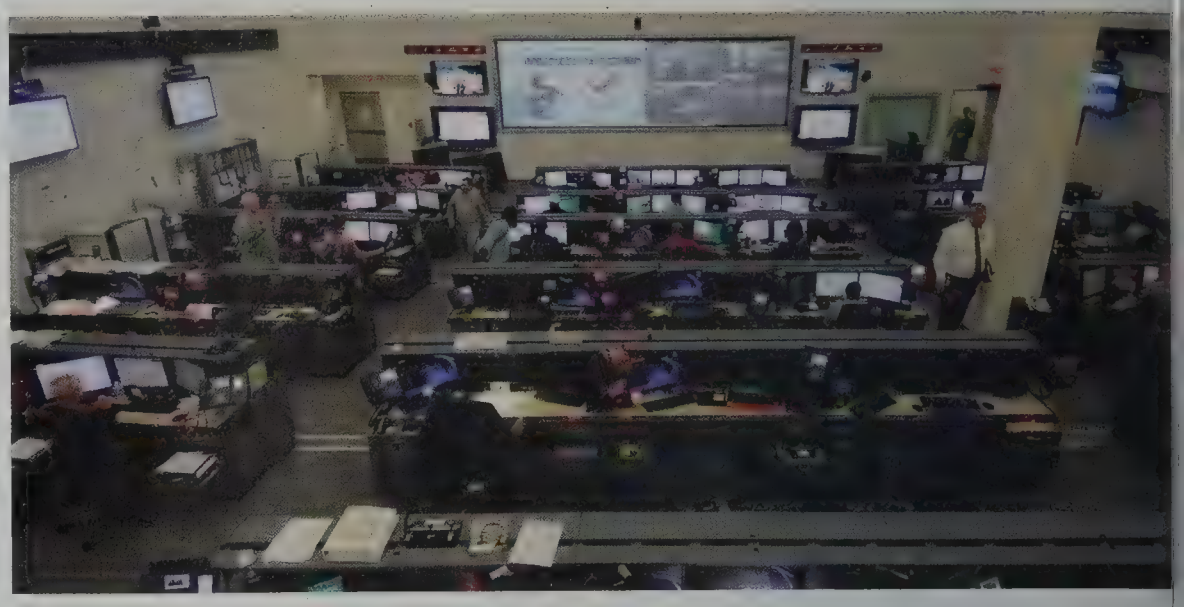
Since 9/11, AMC has brought the capabilities of our industrial base directly to the joint warfighter. Today's AMC is aligned with our combatant commanders to provide responsive, flexible and rapid support in their areas of operation. For example, our Army field support brigades provide logistics synchronization, while our expeditionary contracting support brigades offer full-spectrum contracting support around the world.

By linking the factory to the foxhole, AMC provides real-time readiness to our combatant commanders. At the heart

---

LTG Dennis L. Via *assumed command of U.S. Army Materiel Command in August. Before that he served as the deputy commanding general of AMC. Previously he was the director for Command, Control, Communications and Computer Systems, J-6, The Joint Staff, Washington, D.C. LTG Via has served in assignments as commander of the 82nd Signal Battalion, 82nd Airborne Division, Fort Bragg, N.C.; Third Signal Brigade, III Armored Corps, Fort Hood, Texas; 5th Signal Command; and as the G-6 of U.S. Army Europe. Commissioned in 1980 after graduating from Virginia State University, he later earned a master's degree from Boston University. He is also a graduate of the U.S. Army Command and General Staff College and the U.S. Army War College.*


YOU CAN NEVER PREDICT.
YOU MUST PREPARE.
SELECT GARMENTS WITH GORE® PYRAD®
FLAME RETARDANT TECHNOLOGY.
Reduce the potential for burn injury in flash-fire incidents with GORE® PYRAD® Flame Retardant. This technology enables non-flame retardant textiles to rapidly extinguish after exposure to flash fire. The thermal stability and thermal insulation of the garment is also enhanced. Maximize mission effectiveness and safety with the best combination of thermal protection, weather protection, and comfort.
GORE
PYRAD®
FLAME RETARDANT
gorepyrad.com



AMC's operations center provides real-time asset visibility and readiness to virtually every piece of Army equipment to sustain combat power throughout the global supply chain. AMC can quickly match resources with the evolving requirements of the Army and its combatant commanders.

of our organic industrial base are our life cycle management commands: the Aviation and Missile Command, Tank-Automotive and Armaments Command, Communications-Electronics Command and Joint Munitions Command/Joint Munitions and Lethality Command. Working with their program executive office and program manager counterparts from the Assistant Secretary of the Army for Acquisition, Logistics and Technology, we have achieved readiness rates of more than 92 percent for our major ground systems and well above the Army standards for our aviation systems, an incredible feat given our operational tempo.

In addition, AMC's Responsible Reset Task Force was crucial in triaging, distributing and returning our equipment from Iraq at the conclusion of Operation New Dawn. In fact, we were able to provide approximately 50 percent of the equipment needed for the Afghanistan surge directly from Iraq. This AMC deployable command post has now shifted focus to the challenge of retrograding equipment and materiel from Afghanistan.

Army Materiel Command is also a vital enabler for our combatant commanders as they build the capacity of our partners and allies. AMC's Security Assistance Command manages the Army's foreign military sales mission, ensuring that our partners develop their capabilities and increase their interoperability with our own forces. In the last decade AMC has spearheaded a 400 percent increase in foreign military sales opportunities, allowing us to also maintain critical skills within our organic industrial base.

As our armed forces reorient toward Asia-Pacific, AMC provides extensive capabilities in the region including equipment distribution, sustainment, science and technology advisors, and Army prepositioned stocks. These capabilities can be quickly tailored to meet the needs of the combatant command, which is responsible for more than 51 percent of the Earth's surface.

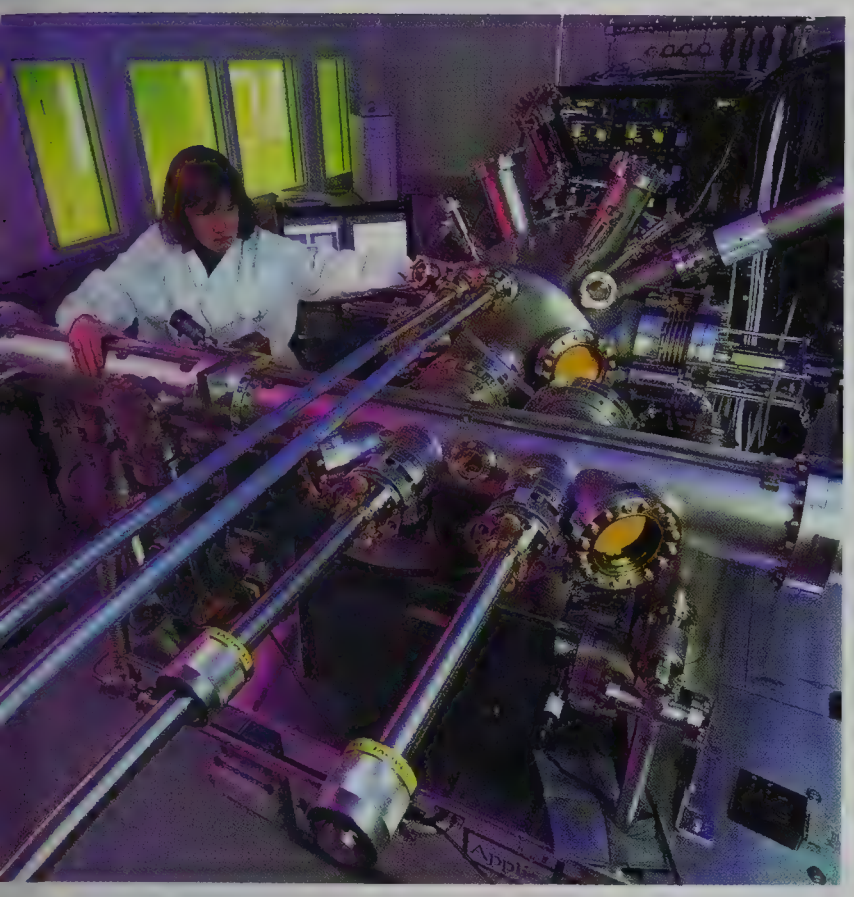
AMC seeks to transform its approach to sustaining its organic industrial base capabilities while providing cost-effective solutions for the nation. AMC has achieved readiness rates of more than 92 percent for its major ground systems and well above Army standards for its aviation systems.

Optimizing the Global Supply Chain

The DoD supply chain is a global network that delivers materiel to our joint forces. Effective supply-chain management synchronizes the processes, resources and efforts of our important global providers to meet each combatant commander's requirements.

No single command influences more segments of the global supply chain than Army Materiel Command. In coordination with joint partners like the Defense Logistics Agency and U.S. Transportation Command, AMC touches each of the physical, financial and information networks that link the global supply chain. In addition, AMC is fully integrated with the major functions of DoD's global logistics mission: maintenance, transportation, supply and logistics management.

From our depots and points of embarkation and debarkation to the theater distribution hubs that support the combatant commanders in their joint operating areas, AMC is a critical enabler at each important node along the global supply chain. Because the Army's future operating environment requires that we provide flexible land power to the joint force, we must look for supply chain efficiencies, identify gaps and enhance DoD's execution of its global distribution responsibilities.



One of AMC's major subordinate commands, the Research, Development and Engineering Command, is a leader in basic scientific research areas such as nanotechnology, armor, robotics, the human domain, fuel-efficient vehicles and simulation.

Transition to Sustainment: The Organic Industrial Base

In step with the Chief of Staff's marching orders, AMC ill retain the extraordinary flexibility and innovative capailities we've attained over the last decade, while continuing sustain our deployed forces at war. We will also focus on ustaining our organic industrial base, however, which has nique capabilities and employs thousands of experienced rofessionals. Because important facilities within the indusial base are aging, we must seek to transform our approach sustaining this capability while providing cost-effective olutions for the nation. One such solution is our public-priate partnership program. In 2011, AMC had more than 350 uch partnerships, generating more than $376 million in revnue and supporting 3,500 government and private industry bs. Programs like this complement each of our core compencies while minimizing duplication and redundancy. Ultiately, our objective is to ensure that our capabilities and talnted workforce retain their central role in the readiness of ur Army and the economy of our nation.

To aid our shift to sustainment, the Army recently reigned the Installation Management Command's Direcrates of Logistics to AMC. By linking these former standone organizations to the Army's larger logistics network, e use our full capabilities from the installation to the inustrial base. For example, the new Enhanced Army Global ogistics Enterprise program provides better buying power r Army installations by expanding competition, increasing pportunities for small businesses and reducing multiple, uplicative contracts.

Team AMC: The Decisive Edge For More Than 50 Years

Although AMC may be responsible for the Army's mariel, the foundation of our success will remain our people. MC is fortunate to have an incredibly talented workforce and is a unique example of the twin components of the Army profession: soldiers and Army civilians. In fact, AMC is the largest employer of civilians in the Department of Defense, and we will continue to serve as a champion for the development of our Army Civilian Corps. From the thousands of skilled-trades personnel who work at our depots, arsenals and ammunition plants, to engineers and scientists engaged in some of the most advanced research projects in the world, to the commanders, senior leaders and managers who lead our organizations and activities, Team AMC is a true national treasure.

Army Materiel Command recently commemorated its 50th anniversary. From Vietnam to the Cold War, from Desert Storm to the wars in Iraq and Afghanistan, our workforce has proven its ability to adapt to our changing national security environment. As we look to the future, AMC has yet another opportunity to help reshape sustainment for our Army so that it remains the most capable land force on the globe.

Building upon our historic past, the U.S. Army Materiel Command stands ready to make a global impact in support of Army and Joint Force 2020 while continuing to provide our nation's warfighters with a decisive edge. ★

AMC is involved with every phase of the materiel life cycle and is the Army's chief player in support of DoD's global supply chain down to the individual soldier.

Celebrating Freedom...

and Those Who Defend It.

Poongsan Corporation salutes members of the U.S. armed forces for your service and sacrifice. Like you, we recognize that eternal vigilance is the price of freedom, and to preserve peace, we must stand ready to defend it.

A supplier of military munitions with four decades of experience, ultra-modern technology and a commitment to setting a new global standard for product quality, Poongsan supports your mission of defending freedom, wherever it is threatened. We are dedicated to advancing human progress through superior products, exceptional people and uncompromising service.

That's the Poongsan way.

POONGSAN

www.poongsan.co.kr

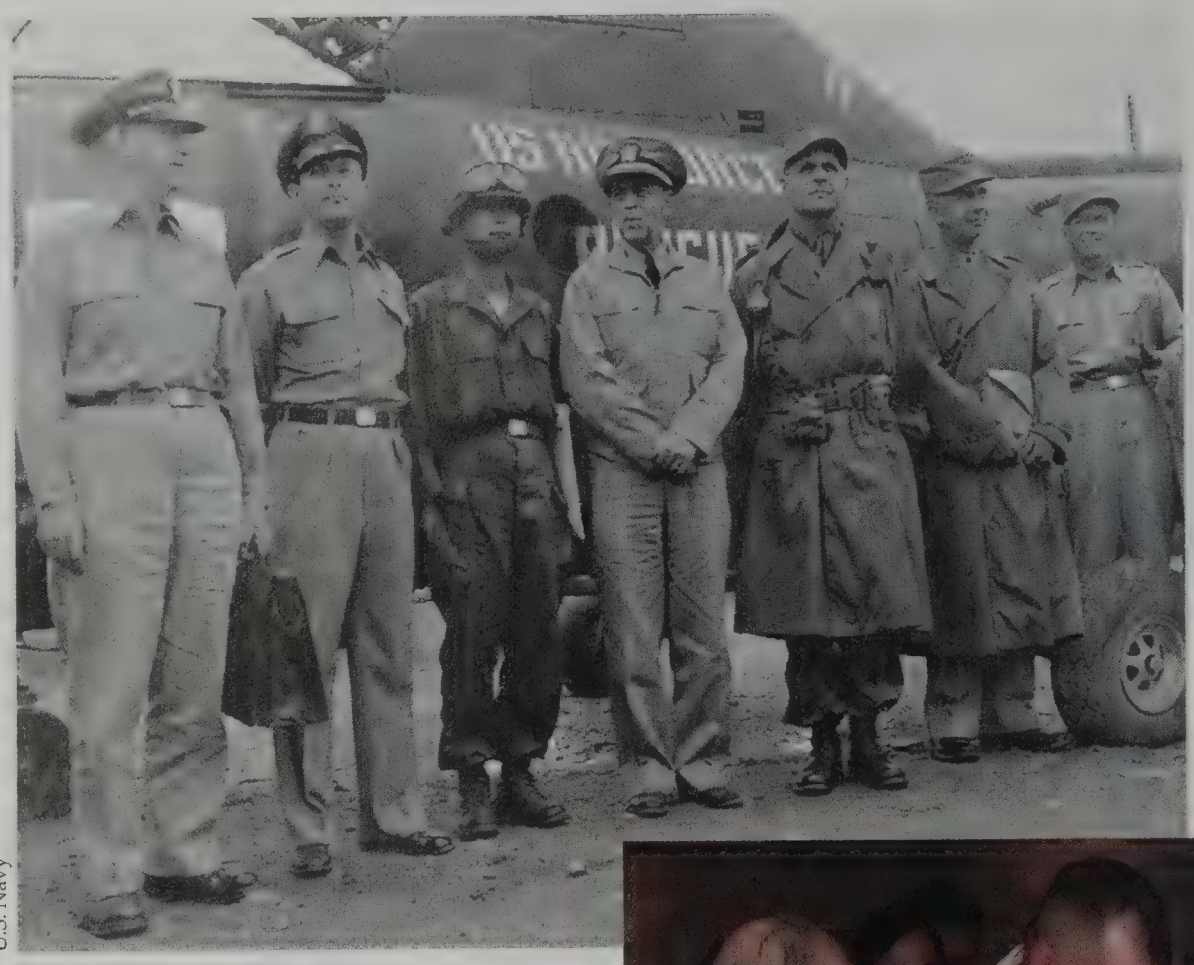
U.S. Forces Korea

The Pacific Focus of the National Security Strategy in Action

By GEN James D. Thurman
Commander, U.N. Command,
Combined Forces Command
and
U.S. Forces Korea

The 2012 U.S. defense strategy reaffirmed the nation's commitment to Asia and the Pacific. This reaffirmation was welcomed by the more than 28,000 soldiers, sailors, airmen, marines and Department of Defense civilians serving in Korea. Every day, the warriors serving in the United Nations Command, Combined Forces Command and U.S. Forces Korea maintain readiness to deter aggression, to defend the Republic of Korea (ROK) and to contribute to the stability of the region.

The U.S.-ROK alliance maintains peace and stability in the strategic terrain of Northeast Asia, a region of global importance. This region generates more than one trillion dollars a year in global trade. U.S. trade with the region amounts to more than $750 billion a year, with an additional



U.S. Navy

Above, delegates to the Korean War armistice negotiations in July 1951 included then-Maj. Gen. Paik Sun-yup (third from left) of the Republic of Korea (ROK) Army, and GEN Matthew B. Ridgeway (center), commander of U.N. Command. Right, GEN James D. Thurman and retired Gen. Paik Sun-yup discuss the Korean War in 2011.

$250 billion in direct U.S. economic investment. In addition to economic power, the countries of this region possess significant military capabilities with some of the largest militaries in the world calling the region home. Some of these countries possess nuclear capabilities.

In stark contrast, North Korea is an exception to the success of the other nations in this region. North Korea is economically backwards and operates in an unpredictable manner outside accepted internationa norms. The recent leadership transitio and the failed long-range missile te raised uncertainty on the peninsul North Korea does maintain a large mi itary capability, however, like other n tions in the region. In addition to ha ing ample conventional capabilities, continues to pursue asymmetric capabi ities in the areas of ballistic missile deve opment, cyber warfare and weapons mass destruction, including a nucle weapons program. The regime's unpr dictable nature coupled with its signi cant military capabilities make Nor Korea a dangerous threat, which th command closely monitors.

The U.S.-ROK alliance and the mem bers of United Nations Comman stand ready to face any challenges presented by North K rea. Born of blood and shared sacrifice on the battlefields the Korean War, the U.S.-ROK alliance has successfully d terred aggression and become the strongest alliance in t world. The enduring U.S. military presence in the Repub of Korea deters aggression, demonstrates our commitme to a stalwart ally and enables regional stability.

The forward-stationed U.S. military and the 16 sendin state members of the United Nations Command mainta the armistice and assist in providing stability. The parti pation of the sending states in the Republic of Korea ar their investigation of alleged armistice violations demo strate the commitment of the international community peace and stability on the Korean peninsula. Their comm ment also enables regional and global prosperity.

The Republic of Korea demonstrates the prosperity a political growth that U.S. and U.N. sending-state presen has enabled. The republic is a free and open democra

***GEN James D. Thurman** is commander, U.N. Command, Combined Forces Command and U.S. Forces Korea. Previously he served as commander of U.S. Army Forces Command. Other assignments include commanding general, U.S. Army V Corps; commander, 4th Infantry Division (Mechanized), Fort Hood, Texas; and commander, Multi-National Division-Baghdad, Iraq, 2006. He also served in Operations Desert Shield/Storm, 1990–91; Kosovo, 1999–2000; and the invasion of Iraq, 2002–03. GEN Thurman has a master's degree in management from Webster University.*

pushing boundaries

From navigation to propulsion, from space travel to logistics, Honeywell solutions are trusted by commercial and defense customers because they work. They improve performance and safety while reducing costs. In other words, they help you do more for less.

Honeywell

For more information, visit **missionready.com**

© 2012 Honeywell International Inc. All Rights Reserved

and the 13th largest economy in the world. It is a significant U.S. trading partner, with whom we recently ratified a free trade agreement. The ROK military is a professional, modern, well-trained and well-led force that has grown over the years from one focused solely on the security challenges on the Korean peninsula to meeting the challenges that we all face around the world, from the Horn of Africa to Afghanistan to U.N. peacekeeping operations in Haiti and the Middle East.

The United Nations Command, Combined Forces Command and U.S. Forces Korea mission is critical to the continued stability in Northeast Asia. This stability enabled many countries in the region, including the Republic of Korea, to grow and develop into constructive members of the global economic, political and security community. My four command priorities—Deter and Defend, Sustain and Strengthen the Alliance, Transform and operational control (OPCON) Transition, and Teamwork and *Katchi Kapshida*—direct this command in the accomplishment of its mission.

Deter and Defend

Our ability to deter aggression and defend the Republic of Korea depends on maintaining the very best readiness. Our servicemembers in Korea execute tough, realistic training across the entire spectrum of operations, which requires well-equipped and well-manned formations. The command possesses state-of-the-art simulation facilities that enable our warriors to train on tasks from individual to high-level unit collective training. Our servicemembers also enjoy high-quality, live-fire ranges and training areas that enable them to train their wartime tasks in a variety of terrain and environments. The Army has equipped our soldiers with the most modern equipment in the inventory. This past fiscal year, the 2nd Infantry Division completed its transition from UH-60A to UH-60L Black Hawk helicopters and fielded the M1A2 Abrams System Enhancement Package and M2A3/M3A3 Bradley Fighting Vehicles. Recent Army manning decisions regarding the 2nd Infantry Division and 35th Air Defense Artillery Brigade further increase our readiness. Our soldiers, sailors, airmen and marines are ready to fight tonight.

Sustain and Strengthen the Alliance

United Nations Command, Combined Forces Command and U.S. Forces Korea, along with ROK and multinational forces, execute two major theater-combined exercises every year: Key Resolve and Ulchi Freedom Guardian. In addition, subordinate units execute combined training at all levels from platoon to battalion with their ROK partners. These exercises increase our interoperability and continue to build the mutual trust that makes our alliance the strongest in the world. They also provide the opportunity to validate the alliance's war plans and identify areas for further refinement. Furthermore, the command utilizes our exercise program to further develop whole-of-government approaches to meeting current and future security challenges. Leaders at all levels conduct frequent engagements with their ROK counterparts. The long history and great strength of this alliance enable U.S. and ROK leaders to have open, frank discussions about issues pertaining to our respective nations and the alliance. These leader actions coupled with our robust exercise program provide the opportunity for our alliance to continue being best prepared to meet the security challenges of the future.

A combined team of ROK and U.S. Army soldiers and Korean Augmentees to the U.S. Army compete during an event at Rodriguez Live Fire Complex near Pocheon, South Korea.

Transform and OPCON Transition

The U.S.-ROK alliance is transforming to meet the security challenges of today and tomorrow. An important initiative is assisting with ROK defense reform and modernization. This initiative incorporates a joint focus to improving command and control and eventually certifying the transition in 2015 to an ROK-led defense. We use our exercise program to help validate our milestones and ensure that we will have appropriate interoperability to execute our wartime mission.

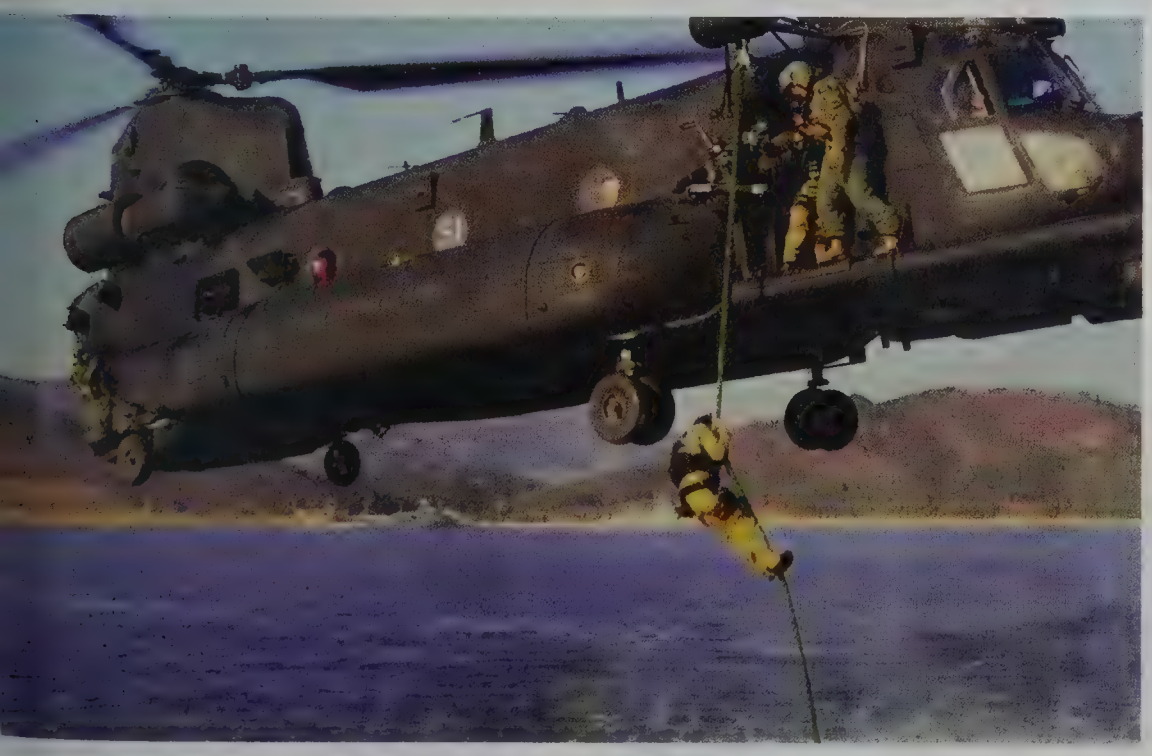
Concurrently, U.S. Forces Korea continues to transform its posture on the peninsula. We are refining our relocation initiatives: the Land Partnership Plan, which relocates the 2nd Infantry Division from north of Seoul to a consolidated footprint at Camp Humphries, and the Yongsan Relocation Plan, which moves U.S. forces out of Seoul to ensure that they are operationally focused. Our forces will be consolidated in two enduring base clusters around Daegu and Pyeongtaek. Our warriors will live in modern facilities similar to what they enjoy at continental United States installations, improving their quality of life. Furthermore, these initiatives provide our units with modern command and maintenance facilities that better enable them to accomplish their wartime mission. This will enhance our flexibility and better position our forces to meet future security challenges. Our force posture transformation also enables U.S. Forces Korea to better support the combatant commander throughout the U.S. Pacific Command area of responsibility.

Stryker vehicles are off loaded in South Korea during Exercise Foal Eagle 2012. The annual field training exercise allows Eighth Army to train side-by-side with its ROK allies, subordinate commands and units from around the world.

Teamwork and *Katchi Kapshida*

Katchi Kapshida, our alliance motto, means "we go together." We practice coalition operations daily and are combined in everything we do. Coalitions succeed because of well-trained and well-disciplined forces working together as a team. There is tremendous teamwork between the ROK and U.S. militaries. Programs like the Korean Augmentation to the U.S. Army, which dates back to the Korean War, place more than 3,300 ROK soldiers in U.S. units and enable the outstanding soldiers from our two nations to learn from one another by working side-by-side every day. Similar programs enable our servicemembers to learn about Korea and its people in a peer-to-peer relationship and to serve as excellent ambassadors for America and its citizens. Our servicemembers volunteer to support charitable causes in their local areas, enabling the Korean people to continue to learn about our country and its people, and enabling people from both cultures to better treat each other with dignity and respect. Our servicemembers are proud to serve in Korea. They strive to be the best representatives of the United States and its people on and off duty.

The Republic of Korea is a great place to soldier. The threat posed by North Korea requires United Nations Command, Combined Forces Command and U.S. Forces Korea to be well trained, well equipped and ready. The U.S.-ROK alliance is the strongest bilateral alliance in the world. Serving in Korea provides soldiers an opportunity to be part of this great alliance, to be well trained on their wartime tasks across the full spectrum of conflict, and to learn about the Korean people and their culture. I look forward to seeing you over here. ★



As part of Foal Eagle 2012, U.S. and ROK SEALs fast-rope off an MH-47 Chinook helicopter and perform a visit, board, search and seizure drill.

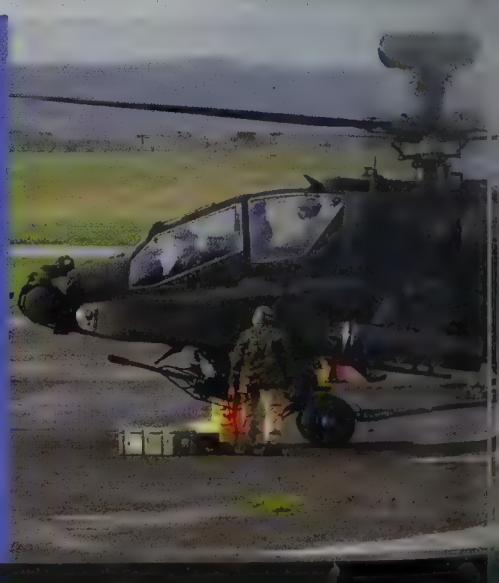
DynCorp INTERNATIONAL

SUPPORTING THE STRENGTH OF THE NATION

More than 60 Years of Global Support for the U.S. Army

The men and women of DynCorp International provide global government services working in support of U.S. national security and foreign policy objectives, delivering support solutions for defense, diplomacy and international development.

www.dyn-intl.com



Moving the Afghan National Security Forces to the Fore

By LTG Curtis M. Scaparrotti*
Commander, International Security Assistance Force Joint Command and Deputy Commander, U.S. Forces-Afghanistan

*LTG James L. Terry has succeeded LTG Scaparrotti as commander, International Security Assistance Force Joint Command/ deputy commander, U.S. Forces-Afghanistan. LTG Scaparrotti is now director of the Joint Staff.

Over the past year, the coalition, the government of the Islamic Republic of Afghanistan (GIRoA) and the Afghan National Security Forces (ANSF) have taken critical steps to maintain the momentum of the campaign and increase stability in Afghanistan.

When I departed Regional Command-East in the summer of 2010, we were proud of our accomplishments but also aware of the great challenges that still existed in Afghanistan. The surge of U.S. and coalition forces was just getting under way, and we were fighting to gain the initiative against a determined enemy.

Now, two years later, both the Afghan and coalition forces have made significant progress: Our strategy is focused, our forces strong, and we have the momentum, resources and resolve to succeed.

An Afghan company executive officer suggests a route into a village to 1LT Kirk Shoemaker, a platoon leader with 504th Parachute Infantry Regiment, 1st Brigade Combat Team, 82nd Airborne Division, in Ghazni Province, Afghanistan, in May.

In the summer of 2011, the U.S. Army I Corps, America's Corps, was integrated into the International Security Assistance Force Joint Command (IJC) headquarters to provide a core capacity specifically trained for the mission.

We established six priorities that guided a shift from coalition forces leading operations to coalition forces supporting the ANSF operations to protect the Afghan population. In the course of the year, we simultaneously implemented the security force assistance (SFA) concept, the U.S. surge recovery, and facilitated the political process of *inteqal* (the Dari word for *transition*) in accordance with the Lisbon conference.

IJC's priorities supported the ISAF commander's intent and strategic vision for the campaign in Afghanistan. The top two priorities that drove our daily activities throughout our deployment were accelerating the development of the ANSF by moving them into the lead and maintaining the momentum of the campaign by relentlessly pursuing the enemy and their networks.

During the summer of 2011, the top priority was to maintain the momentum of the campaign; the second priority was accelerating the development of the ANSF. During late fall of 2011, we decided to prioritize the acceleration of the ANSF. We knew that, in light of the reduction of coalition forces, the ANSF had to steadily move to the fore. Many Afghan units were ready, and the sooner we pressed the ANSF into the lead, the better. In addition, this shift required coalition forces to change their mind-set—to advise and enable their Afghan partners to take action rather than doing it themselves. Such a change in mind-set was difficult for some coalition leaders and soldiers, particularly among U.S. forces

The Building Blocks of a Sustainable Force

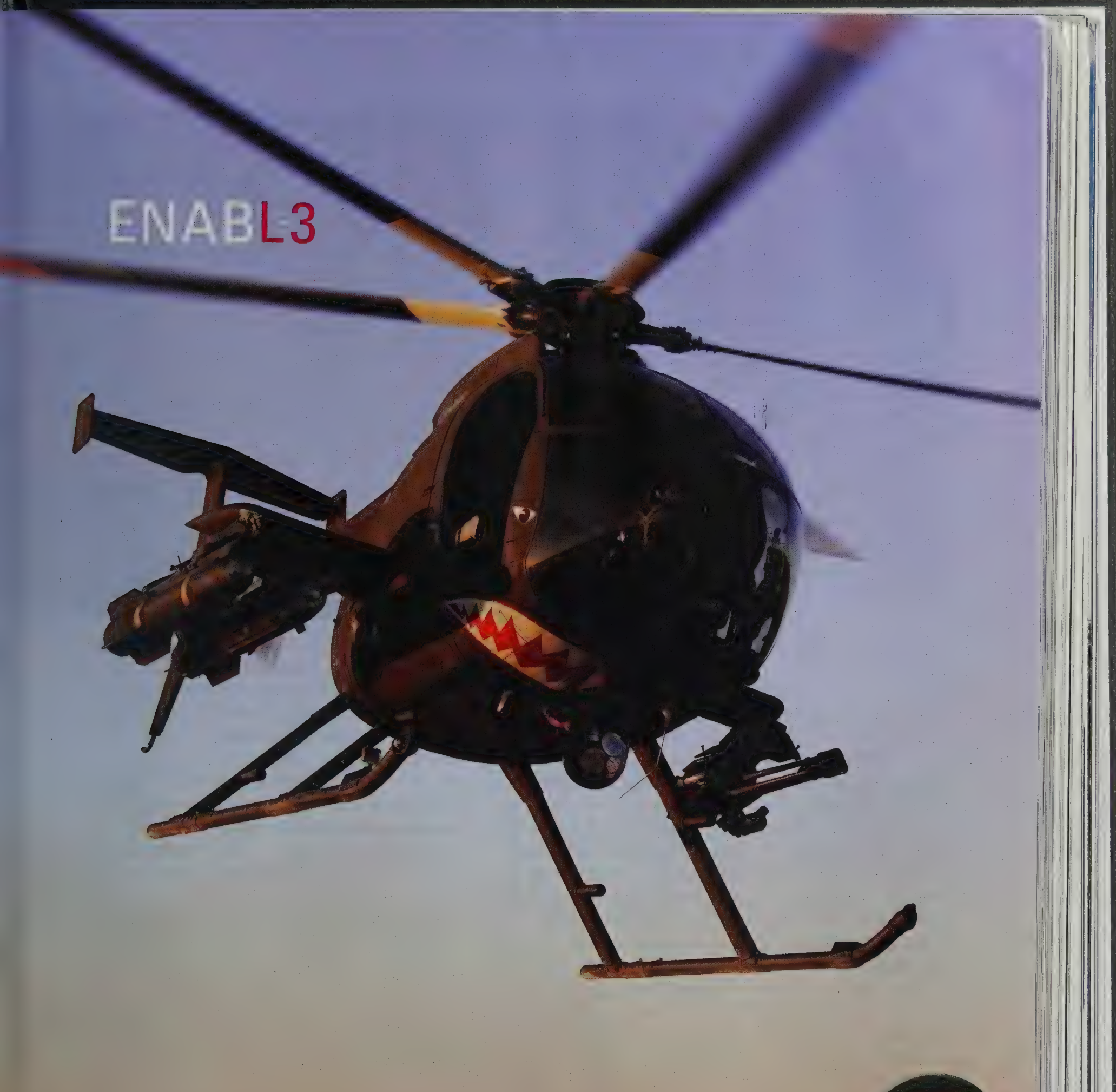
Today, the ANSF are a capable force. In fact, they are better than they think. During one of our important leader engagements, Dr. Ashraf Ghani, president Hamid Karzai's advisor for *inteqal*, noted that as he traveled across Afghanistan he found that the Afghan national army (ANA) was actually at least two years ahead of where the Afghan people thought they were. The people didn't know how far the ANA had come and the great work they had accomplished.

Both the ANA and Afghan national police (ANP) have increased their focus on leadership. They more readily removed poor leaders and created the necessary Afghan systems to develop and sustain good leaders throughout their formations. Together, we focused on increasing the number of training schools and Afghan trainers to assist with the development of motivated and trained Afghan officers and NCOs. Now, 70 percent of the Army trainers and 65 percent of the police trainers are Afghan; and the ANSF have a significant cadre of branch-trained and battlefield-experienced NCOs and officers in their forces.

Throughout this campaign, attrition has limited progress and prevented both the ANA and ANP from reaching their full potential. Over the past year the ANSF were able to make significant improvements: This past spring the ANA reached an all-time low of 1.2 percent attrition, and the ANP sustained an attrition rate less than 1.2 percent for several months, a result of improving leadership that demonstrated

---

LTG Curtis M. Scaparrotti *assumed command of the International Security Assistance Force Joint Command and became deputy commander, U.S. Forces-Afghanistan in July 2011. Previously he served as the commanding general of I Corps and Joint Base Lewis-McChord after serving for two years as the commanding general of the 82nd Airborne Division. During that time, he deployed to Afghanistan as the commanding general of Joint Task Force-82 in Eastern Afghanistan. Before that, LTG Scaparrotti served as the director of operations for U.S. Central Command and the 69th commandant of cadets at the U.S. Military Academy. LTG Scaparrotti was commissioned into the Infantry in June 1978 after graduating from the U.S. Military Academy. He has a master's degree in education from the University of South Carolina.*



ituational awareness depends on seeing what the eye can't, day or night, and in all weather conditions. To rovide the complete picture for warfighters and homeland protectors alike, L-3 offers industry-leading ll-motion video and best-in-class imaging technologies in our MX™-Series airborne and ground-based sensor ystems. We give you the tools you need to safeguard your people and national infrastructure, 24/7. o learn more, visit www.L-3com.com/WESCAM.

nable — It's what we do.

L-3com.com

The signing of Operation Naweed *1391 at ISAF Joint Command Headquarters in January was "a significant accomplishment for the Afghan security ministries and a turning point for the coalition's role in Afghanistan."*

the growing resolve and professionalism of Afghan soldiers and uniformed policemen.

An ANP commando by the name of Hamidullah is an example of this growing resolve and professionalism. During an insurgent attack in Kabul on April 15–16, 2012, Hamidullah led his fellow ANP through multiple engagements, including the heroic push to clear the final insurgent stronghold in a high-rise building. Hamidullah is now a local hero, memorialized on billboards along the roads of Kabul. There are many stories like this across Afghanistan, showing that the strength and leadership of individual Afghans within the ANSF are changing the course of their country for the better.

One of the most significant accomplishments the ANSF achieved during the past year was the implementation of Operation *Naweed* (good news) 1391. It was the first operational-level plan written, developed, and published by the Afghan security ministries in Dari and then translated into English. Another unprecedented accomplishment is that 18 non-security agencies worked together to produce an annex that described the necessary governance and development support required for campaign success.

Maintain Momentum, Pursue the Enemy

Operation *Naweed* 1391 was both a significant accomplishment for the Afghan security ministries and a turning point for the coalition's role in Afghanistan. When I Corps joined IJC, the coalition was at its peak strength in Afghanistan. The U.S. and coalition surge had given us the capacity to degrade the insurgency and to accelerate the development of the ANSF.

Although the time had come to recover our surge forces, we had to retain our gains and keep relentless pressure on the enemy to ensure success in the campaign. Aggressive combined force operations over the past year have steadily reduced the enemy's capabilities and denie the Taliban their campaign objectives.

A unique component of our efforts has been generated b our special operations forces, whose efforts have capture insurgent leaders, driven the senior leadership to sanctuar in Pakistan, and disrupted the enemy's ability to plan an direct insurgents. Of significance, the Afghan special force of the army and the police are quite competent, increasingl moving into the lead in these operations.

This year our coalition forces, partnered with the ANS expanded the secure areas, particularly in Helmand, Kanda har and the approaches to Kabul. The skill of our junior leac ers to adapt to the environment and the enemy's technique impressive and a significant component of our progress.

On battlefield circulation in the village of Nalgham i Kandahar province, I had the privilege of meeting CPT Der nis Call, a company commander in Zharay District, wh had defeated a stubborn enemy and secured an area incluc ing Taliban leader Mullah Omar's hometown. He describe how he and his leaders had assessed the enemy's tactics an changed their own to increase his unit's lethality and prote the force. This young leader also showed me the challenge of enabling Afghan forces at the tactical level. Like a fello marine company commander in Marjah, however, he wa confident of his Afghan partners' potential to take respons bility for security. The ANSF are stepping into the lea across Afghanistan, and their ability to secure the gains an maintain the pressure on the enemy will be tested throug out 2012.

Campaign Progress: *Inteqal*

Over the past year, the Afghan government and the coal tion have successfully implemented the first two tranches c *inteqal,* and by this fall we will see the Afghan governmer

taking the lead for security in areas representing 75 percent of the population. At each of the provincial transition ceremonies, the Afghans' pride and sense of accomplishment were apparent. Increasingly, Afghans are embracing responsibility for their own security, governance and development.

Two years ago it would have been hard to envision this transformation, but today it's a reality. As a result, a path to the fifth and final tranche of *inteqal* has been created, and by mid-2013 the ANSF will have assumed the lead for security nationwide.

Over the course of the past year, we've witnessed steady progress across the country. GIRoA and the partnership with the coalition have taken significant steps forward. Afghanistan will continue to face tough challenges, however, including a regenerative enemy enabled by Pakistan sanctuaries, corruption and an insufficient economy. Nevertheless, the recent international commitments in Chicago and the bilateral security agreements provide the support for continued progress and hope to the people of Afghanistan.

PFC Erick Montoya, a paratrooper with 1st Brigade Combat Team, 82nd Airborne Division, patrols through an alfalfa field in southern Ghazni Province. Other paratroopers and partnered Afghan soldiers follow.

Afghanistan: Now and Then

It is of value to look back. There is a remarkable difference between the Afghanistan of today and the Afghanistan under the Taliban, especially in the critical areas of education, health care and communication. For example, there are now five times as many children in primary school—more than 8.3 million students, 3.2 million of whom are females. In the area of health care, approximately 85 percent of Afghans now have access to basic health care within one hour of where they live (up from 9 percent in 2001), and remarkably, life expectancy has improved to between 62 to 64 years. In 2009, life expectancy was between 47 and 50 years.

The means of communication is rapidly changing in Afghanistan and changing the Afghan people. There are now six cell phone companies in Afghanistan that serve more than 15 million people (half the population) and provide coverage to 80 percent of the country. Television has also expanded significantly, and 75 private television companies televise news and entertainment. Despite their poverty, Afghans value these services, do not want to lose them, and know that they are not—and cannot—be provided by the Taliban.

The way ahead in Afghanistan remains complex and difficult. Nevertheless, the commitment of the international community, the will and increasing competence of the Afghan forces, and the skill and tenacity of our soldiers and coalition forces—many with multiple tours under their belts—provide the vital resources to ensure progress through 2014 and beyond. ★

SSG Chad Bordelon, 501st Infantry Regiment, 4th Brigade Combat Team (Airborne), 25th Infantry Division, gives villagers a self-wind radio while conducting a security patrol in Shaway Valley, Khowst Province, Afghanistan, in June.

DATRON SCOUT

altitude = 500m
max op-time= 20+ minutes

max range = 3km
weight = 1.3kg

payloads: 5MP Camera
10X Optical Zoom
FLIR thermal sensor

BY ALL MEASURES, THIS COULD BE YOUR GUARDIAN ANGEL.

THE DATRON SCOUT is a lightweight, quad-rotor Micro Air Vehicle designed to provide on-demand intelligence, surveillance and reconnaissance. Effectively enhance the ISR element of any mission, anywhere, at any time of day with the Datron Scout. Vertical take-off, "hover and stare", and silent operation ensure that your team will never again enter a situation blind. See the Datron Scout in action at www.dtwc.com

DATRON
Performance You Require. Value You Expect.®
www.dtwc.com sales@dtwc.com

Advise, Assist, Win: Report from Afghanistan

By LTG Daniel P. Bolger
Commander, Combined Security Transition Command-Afghanistan/Commander, NATO Training Mission-Afghanistan

It was a job nobody wanted, but somebody had to do it. The war wasn't going too well. In fact, that was a gross understatement. Things were in terrible shape, all bad and getting worse. Our British allies had decided to cut their losses, hold on to what was theirs and wait for the Americans to decide. The Canadian combat role was over. The French were split domestically, arguing about whether to keep fighting or not to keep fighting. Other allies hung back, waiting for something good to happen. And our principal partner in country was a mercurial, quixotic figure, a small man desperately worried about why his disciplined, zealous opposition commanded great loyalty at the village level, while at times our guy's writ seemed limited to his own capital. In such a grinding military cam-

GEN Joseph W. Stilwell helped to turn the tide in the China-Burma-India theater.

paign, after 11 years of indecisive clashes, it would be wildly optimistic to think you could accomplish much of anything. As for winning? The smart money knew the deal. Forget about it. Cut your losses. Quit now.

Yes, things did not look promising in the China-Burma-India theater in January of 1942.

Crack Imperial Japanese regiments had Chiang Kai-shek's China by the throat, British Burma under heel and British-ruled India reeling. With Adolf Hitler's Nazi forces rampaging across Russia and North Africa, the British, Canadians, Free French and all the rest had their hands full. They contributed what they could, but to save China would take the Americans—right?

No, that wasn't right. It would take the Chinese, advised, assisted and, if done well, inspired by the Americans. A handful of combat advisors—a mere 2,000—would be asked to go to the far side of the world and get something going.

To kick off this effort, Army Chief of Staff GEN George C. Marshall needed a very senior officer to go to China immediately. Marshall approached the man who would have been—and some said should have been—Army Chief of Staff instead of him: GEN Hugh Drum. Drum was a Silver Star recipient, a brilliant performer in World War I, the former aide to GEN John J. (Black Jack) Pershing, and a star in the recent Louisiana Maneuvers. But Drum said no. He wanted something bigger, something better, a real command, not this thankless, awful China advisor duty.

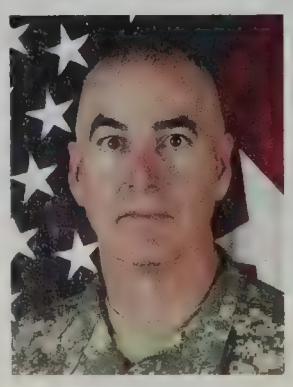
So Marshall asked MG Joseph Stilwell. A terrific trainer and troop leader, Stilwell had already been promised command of the U.S. invasion force preparing to land in North Africa. Stilwell's response defined him: "I'll go where I'm sent."

He did. Thanks to Stilwell, and a few thousand more Americans like him, the thankless, awful job got done. The Chinese won their war. After World War II, America named a fort in upstate New York for Hugh Drum. These days, though, you don't hear much, if anything, about Joe Stilwell. Maybe you should, because the mission he accepted is now our mission too. It's a different war, a different enemy and a different time, but we also have gone where we've been sent.

The American task in Afghanistan is to ensure that that country is never again a safe haven for the likes of the al Qaeda terrorists who attacked us on September 11, 2001. The former Taliban rulers had created a grim, benighted Petri dish in which the al Qaeda infection grew and flourished. Blown aside in an unconventional lightning invasion in late 2001, the Taliban no longer rule much of anything, and al Qaeda has been hard hit. But nothing is guaranteed. After more than a decade, the war still hangs in the balance. We and our many faithful allies and partners, especially the long-suffering Afghans, have fought long and hard, but to hold what we've cleared, it's up to the Afghans now. Like Stilwell in China, our job now is to advise, assist and secure the victory.

To be effective in this kind of war, whether with the Chinese regiments of Stilwell's time or the Afghan *kandaks* (battalions) of ours, we need three things:

- Partner units, to show the local uniformed forces how to fight, and to energize them to do so.
- Embedded small-unit advisor teams, to coach the partner elements in the field under fire and to bring in essential



LTG Daniel P. Bolger *assumed command of Combined Security Transition Command-Afghanistan and NATO Training Mission-Afghanistan in November 2011. Previously, he served as the deputy chief of staff, G-3/5/7. He also served as the commanding general, 1st Cavalry Division/ commanding general, Multinational Division-Baghdad, Operation Iraqi Freedom. In addition, he was an advisor to the Iraqi army and served as commander, Joint Readiness Training Center, Fort Polk, La. He holds a doctorate in Russian history from the University of Chicago and has published a number of books on military subjects.*

H-6i cockpit photo courtesy of Boeing.

Providing pilots with the state-of-the-art equipment they need to maximize safety and efficiency isn't just our goal, it's our duty. We anticipate the needs of our customers with a vast array of avionics and aviation products — including configurable voice and data recorders, collision avoidance systems, transponders, navigation products, and cockpit display systems — that sets the standard for next-generation requirements on both military and commercial platforms. With such a wide range of capabilities, it's easy to see that at L-3, we're as diverse as aviation itself. To learn more, visit www.L-3com.com/AviationProducts.

Capable — It's what we are.

L-3com.com

U.S. soldiers consult with an Afghan national army commander in the Nak district. U.S. soldiers and Afghan forces are working together to be effective, and the U.S. task now is to advise and assist to ensure that local forces are capable and prepared.

enabling combat capabilities from the powerful U.S. and coalition armed forces.

■ Institutional support, to organize, train and equip the indigenous troops for battle, to forge cohesive teams ready to fight and win.

On the operational side, the International Security Assistance Force Joint Command (ISAF JC) supports the Afghan soldiers, airmen and police. The ISAF JC has long provided partner units and some advisors. The new security force assistance teams (SFATs) expand the advisory effort to almost all Afghan army and police *kandaks*, police districts, and higher headquarters. These SFATs number 12 to 18, almost all veteran officers and noncommissioned officers with long service in Iraq and Afghanistan. They live, eat, sleep and fight with their Afghan brothers. Before this war, most of this kind of thing was done by carefully assessed, highly experienced Special Forces. But while our current junior and middle leader ranks may not be qualified as Special Forces, they have indeed been assessed and tried in the unforgiving *qalats* (rural enclosures) of Afghanistan and countryside of Iraq. Like Joe Stilwell in hi day, they have what it takes.

Although ISAF JC combat units today compose about a third of the fighting strength in country, that number wil decrease over the next few years. Our combat role will con tinue—that is a given, regardless of the number of ISAF JC maneuver battalions—but over time, the main effort is in creasingly Afghan. The SFATs and their Afghan partners ar stepping forward to keep the pressure on the enemy an hold the hard-won gains of the last decade. This is the wa Americans and their friends see on television, read about i the newspapers or follow on the Internet. It is truly the tem pered, razor-sharp blade of the sword, the business end.

The hilt of the sword gives it heft an balance. That comes from the Afgha army, air force, and police ministeria training and logistics contingents. Ad vising them falls to NATO Trainin Mission-Afghanistan (NTM-A), a sup porting command to both ISAF JC an the Afghans. These 5,000 uniforme advisors, backed by almost $10 billio in annual security assistance funds work in the background to field an sustain their partners. You don't hea much about NTM-A, nor should you At this point in the war, it is all abou the Afghans.

Well it should be. At the same tim the United States surged 30,000 troop into the country and our ISAF part ners sent 10,000 more, the Afghans re cruited, trained and sent forth mor than 120,000. This Afghan surge is i the fight today. The Afghans intend t keep those troops there even as th ISAF combat forces execute their grad

GEN Martin E. Dempsey (left), Chairman of the Joint Chiefs of Staff, meets with LTG Daniel P. Bolger, commander of NATO Training Mission-Afghanistan (NTM-A), in Kabul during GEN Dempsey's April visit. NTM-A helped generate a surge of more than 120,000 Afghan troops.

ıal withdrawal over the next two ears or so. Generating that Afghan surge represents a major accomplishment of NTM-A, building on years of work by previous advisory organizations.

Challenges remain. One of the biggest involves Afghan logistics. Over the last few years, the Afghans and ISAF rightly focused on getting soldiers, airmen and police into the villages. We did not emphasize sustainment, taking advantage of superb U.S. and coalition combat service support to fill the gaps. Those days will soon end. Now the Afghan logisticians must step up. Their supply, maintenance and medical elements are not technologically sophisticated, nor are they particularly clever with PowerPoint, but they are learning to be reliable, with sturdy trucks, inked logbooks and a drive to get support to the point of need. Both ISAF JC and NTM-A have made this a main effort for the current combined annual campaign, which the Afghans call Operation *Naweed* (good news). The jury is still out, but it looks like we may soon have some welcome *naweed* regarding Afghan logistics.

SPC Shawnte Rollins, 501st Infantry Regiment, 4th Brigade Combat Team (BCT), 25th Infantry Division (kneeling), and Afghan soldiers collect information from motorists passing through a control point at Chanigai Pass, in Afghanistan's Khowst Province.

Another area for continued work involves Afghan leadership. You cannot build an NCO corps overnight, and the Afghans are working to overcome years of the old officer-centric Soviet method. In the officer realm, that same Soviet model exerts a dead hand of centralization and bureaucracy that can stifle initiative. All leader development is hobbled by an adult male literacy rate of 15 percent. Thus, leader development, starting with universal literacy training for all recruits, remains a high priority. There is hope here, and plenty of good, tough, young Afghan leaders, but it will take time to get this right.

The last major area for immediate attention relates to ministerial capacity. It exists but exhibits limited depth and uneven quality. As much as we all often critique the Pentagon, working with the new Afghan ministries can make one long for clarity in regulations regarding personnel, military justice, budgeting, supply accountability and investigations, among many other given aspects in more mature militaries. If logistics represents this year's emphasis and leader development the work of a decade, helping the Afghans sort out their ministries will be a generational effort. We have begun, but it will be a long road.

That long road is exactly the same sort of rocky, uphill path that confronted Joe Stilwell and his teammates more than seven decades ago. Like those heroes of World War II, we have started. The Afghans are with us. We have already come a long way in the Hindu Kush. We don't look down, and we don't look back. Heads up, eyes clear, one boot in front of the other, we're committed. We're moving out. ★

An Afghan national army commando candidate teaches fellow candidates the proper procedures on cleaning a weapon as Afghan commandos watch on the range at Camp Morehead, Afghanistan, last October.

TEAM PHANTOM

PHANTOM WARRIOR TLS™

UNIVERSAL MOUNTING BRACKET

PHANTOM RESQ LENS®

Our two latest accessories take the capabilities of our Phantom Warrior TLS™ to the next level for Army Aviation. Be a PHANTOM WARRIOR® or BECOME A TARGET.

CALL NOW. JOIN OUR TEAM.

Covert. Tactical. Durable.

Personal, Vehicular, Equipment, Movement and Specialty Lighting
American made in Rockledge, Florida
PH: 888-533-4968 **www.phantomlights.com**

©2012 Phantom Products, Inc. careers@phantomlights.com

PHANTOM PRODUCTS MADE IN U.S.A. MILITARY LIGHTING

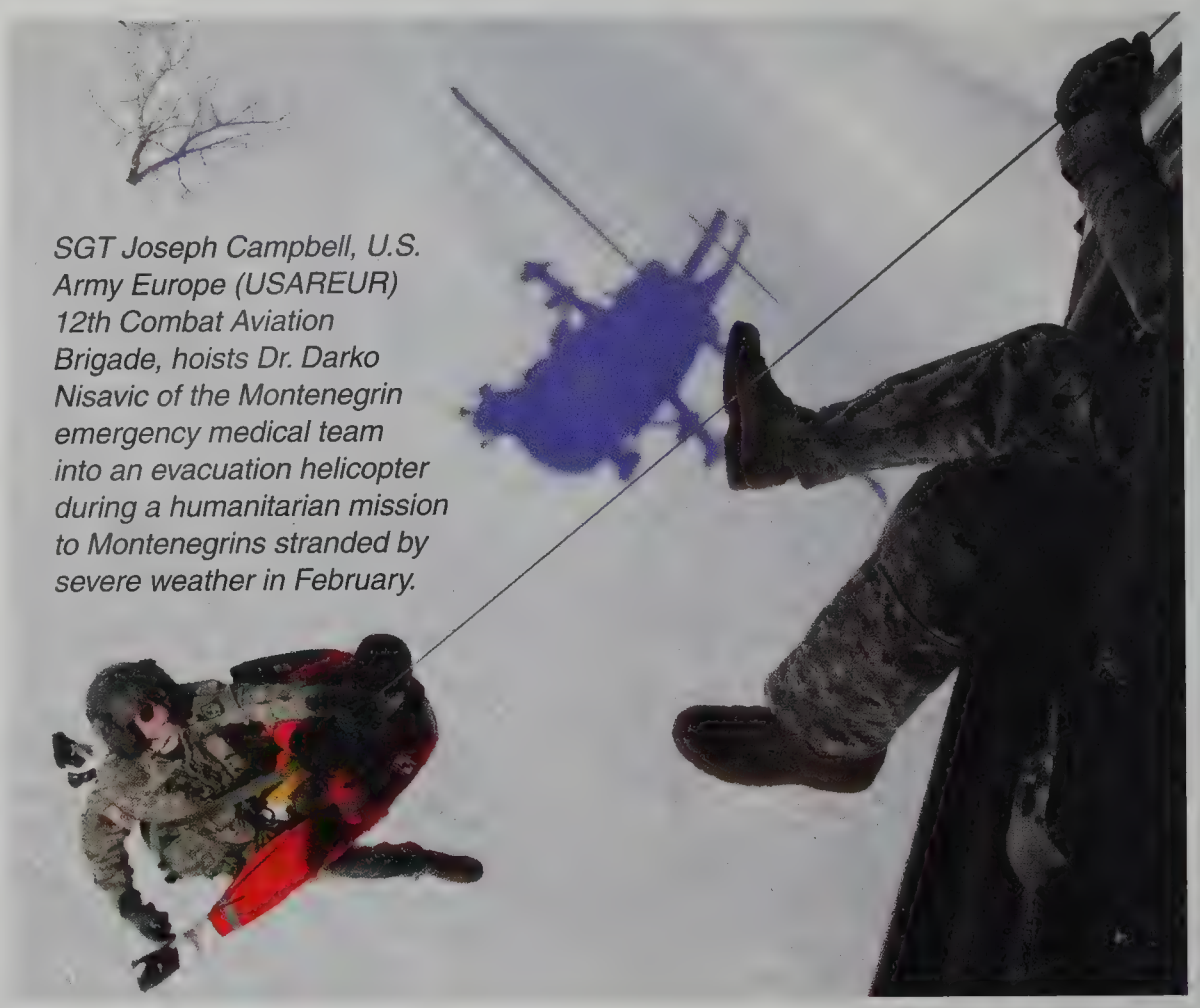
A Day in the Life Of the U.S. Army in Europe: Advancing America's Interests

By LTG Mark P. Hertling
Commanding General, U.S. Army Europe
and Seventh Army

As the sun rises above U.S. Army bases in Germany and Italy, soldiers form up to begin another day moving America's strategic interests forward. Further afield, U.S. Army Europe (USAREUR) soldiers start work in forward locations from Norway to Israel, Nigeria to Afghanistan, fighting insurgents, fueling vehicles and manning radars. On any given day, USAREUR soldiers support seven combatant commands (COCOM) across the world as America seeks to prevent conflicts, shape the global environment with our international partners and win any contemporary fight.

USAREUR's mission is to train, prepare and provide forces globally for unified land operations, but it also has significant

Paratroopers from (left to right) the U.S. Army, Canada, the United Kingdom, Belarus, Poland and Ukraine participated in Rapid Trident 2011, a multinational exercise in Yavoriv, Ukraine.



SGT Joseph Campbell, U.S. Army Europe (USAREUR) 12th Combat Aviation Brigade, hoists Dr. Darko Nisavic of the Montenegrin emergency medical team into an evacuation helicopter during a humanitarian mission to Montenegrins stranded by severe weather in February.

requirements as an Army service component command in a land-centric theater. USAREUR directly supports U.S. European Command and U.S. Africa Command (AFRICOM) with forces and is executive agent for the European theater's military functions. In this capacity, USAREUR also supports U.S. Central Command, U.S. Special Operations Command, U.S. Transportation Command, U.S. Cyber Command and U.S. Strategic Command while strengthening alliances and improving the quality of life of soldiers, families and the civilian workforce—all in a day's work.

In USAREUR, America's interests are secured by highly capable soldiers and formations operating with European allies. How they fulfill the Army's role and expand our nation's strategic reach on a daily basis is USAREUR's story.

* * *

Trudging through the gravel on the way to his vehicle, the specialist from the 173rd Airborne Brigade Combat Team stares out at the incredible Afghan scenery surrounding his outpost. Briefly thinking of his home station in Italy, he shifts focus to today's NATO observer/mentor/liaison team-support mission. Linking up with the NATO team, he notes Hungarian and French uniforms, and it reminds him of his predeployment training in Germany. He remembers those uniforms and the heavily accented English of his European comrades who trained alongside him at the Joint Multinational Training Center (JMTC).

Thousands of miles away in Hohenfels, Germany, an Italian captain of the Grizzly Observer/Controller team conducts an after action review for a Bulgarian infantry company. The Bulgarians, like so many of USAREUR's partners, are preparing to rotate into their nation's 600-man combat force in Afghanistan and are at the JMTC for their pre-mission training. As they listen to the Italian officer explain proper patrol techniques, they look around and see their American, Polish and Slovenian counterparts listening, too.

Across post, JMTC planners are executing the plans for the next Decisive Action Training Exercise, scheduled for October 2012. Featuring combat formations from nine partner nations, the exercise will challenge the 2nd Cavalry Regiment (Stryker) as the leader of a multinational force in a hybrid threat environment.

These examples show how the missions providing globally available combat troops and building partner capacity merge. The specialist in Afghanistan trained with American and multinational troops, many of whom are on his flank in Afghanistan. Today, of more than 45,000 non-U.S. forces in the International Security Assistance Force, more than 43,000, or 95 percent, come from one of USAREUR's 51 theater nations. The specialist benefitted from his multinational experience before deploying, the capacity of his foreign comrades improved, and greater interoperability undoubtedly saved lives and improved mission effectiveness.

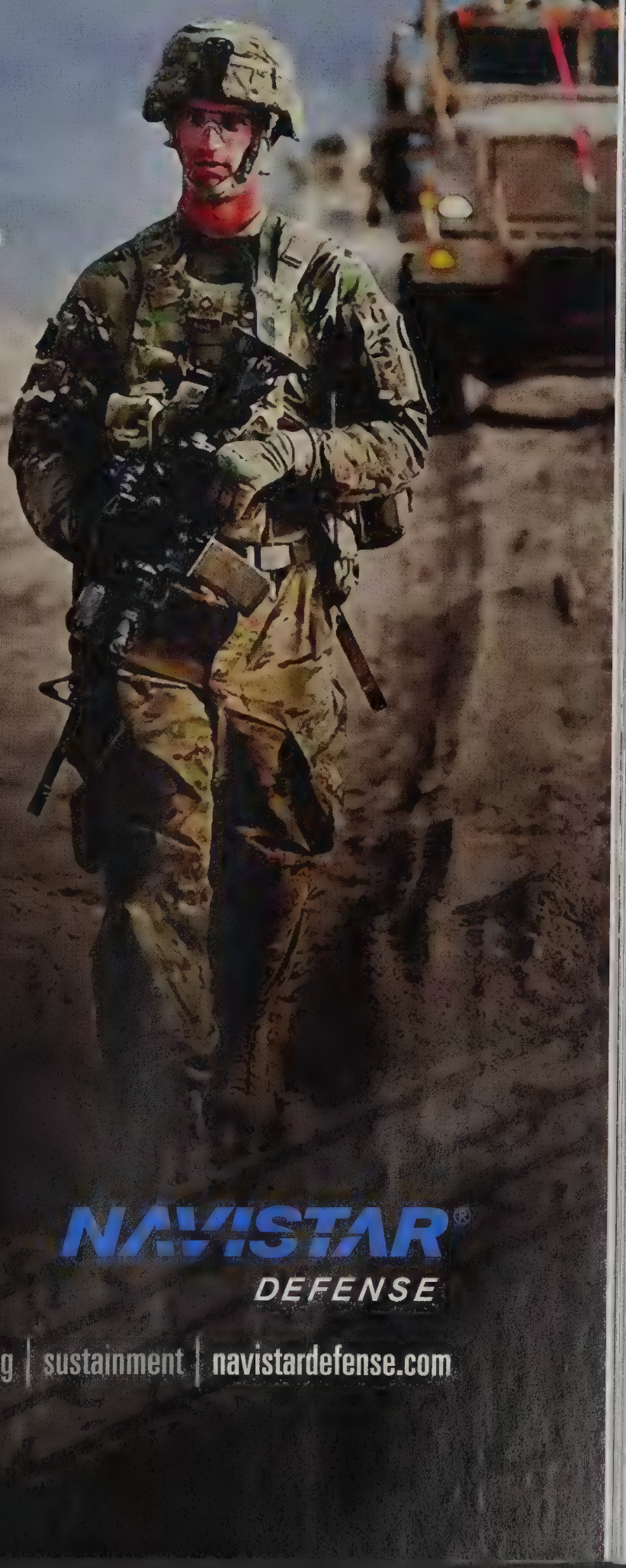
While the fight in Afghanistan continues, USAREUR responds to other crises. In March 2011, the 66th Military Intelligence (MI) Brigade and 19th Battlefield Coordination Detachment (BCD) deployed specialists to support AFRICOM's Libyan contingency: Operation Odyssey Dawn. In an air-dominated campaign, these soldiers formed the core of intelligence and targeting for the force and later continued as the core of the eventual NATO force. Since then, the 66th MI Brigade instituted a program to develop NATO's intelligence processes and the 19th BCD continues to contribute to developing NATO's airspace control doctrine, along with myriad other missions.

USAREUR's 5th Signal Command is addressing global cyber challenges while providing the backbone for strategic communications between deployed forces and the

---

LTG Mark P. Hertling *is the commanding general of U.S. Army Europe. His previous assignments include deputy commanding general for initial military training, Training and Doctrine Command, and commander, 1st Armored Division. He was commissioned from the U.S. Military Academy in 1975 and holds a master's degree in exercise physiology from Indiana University. He is a graduate of the Command and General Staff College, School of Advanced Military Studies and the National War College.*

PROGRESS NEVER STOPS.



You are an American Soldier, the centerpiece of America's Army, and you deserve the best equipment and support our country has to offer. For more than 70 years Navistar Defense has been committed to supporting our Soldiers. From next-generation vehicle and engine designs to unparalleled service, we've got the drive to keep you moving forward.

NAVISTAR® DEFENSE

INTERNATIONAL

MAXXFORCE D

engineering | manufacturing | sustainment | navistardefense.com

United States. Having designed the U.S. Army's model for the Joint Enterprise Network, part of the Secretary of Defense's Joint Information Environment, the "5th SIG" is America's cutting-edge cyber warfare force.

Already partnered with multinational experts, 5th SIG's cyber initiatives include expanding simulated cyber threats during U.S. and multinational training exercises and changing attitudes towards cyber warfare from a parochial signal community function to an operational reality. The corresponding increase in American and partner-cyber capability is essential to America's strategic future.

Building partner capacity isn't limited to tactical and operational processes. After 70 years of operating with European allies, USAREUR understands quality leadership is just as important. As evidenced by the multinational support in Afghanistan, USAREUR continues helping its most reliable partners simultaneously achieve improved competency while reassuring them of America's commitment.

In Posnan, Poland, a staff sergeant from USAREUR's JMTC graduates from the Polish Warrior Leader's Course. The first American to attend, this NCO represents 12 years of developing an NCO education system with one of our strongest military partners. Through cooperation with USAREUR, Poland established one of Europe's best NCO education systems; now we share in their success. The dramatic increase in Poland's leadership capacity demonstrates the power of sharing America's bounty of military experience with others.

Beyond training with allies and building partner NCO Corps, USAREUR contributes to the success and capabilities of senior leaders throughout the theater. In July, USAREUR conducted the first-ever Combined Force Land Component Commander Course outside of Carlisle, Pa., with the majority of participants coming from allies. This seminal event—when senior colonels and brigadier generals from 19 European nations were joined by one U.S. Air Force and two U.S. Army generals in Grafenwoehr—contributes to the Mission Command capability of future coalition forces.

America's strategy goes beyond winning today and tomorrow; it prioritizes deterrence and sustaining the strategic access that supports tomorrow's contingencies. Two USAREUR units—the 21st Theater Sustainment Command (TSC) and the 10th Army Air and Missile Defense Command (AAMDC)—are vital to deterrence and ensuring strategic access.

Through its missile defense policy, America works closely with European partners to deter and potentially defeat regional ballistic missile threats. The 10th AAMDC

Clockwise from above, V Corp's mission rehearsal exercise, Exercise Unified Endeavor 12-2, is under way at the JMTC 's Grafenwoehr (Germany) Training Area. A U.S. observer controller with 173rd Airborne Brigade Combat Team confers with his Polish counterpart during the allies' engagement with opposing forces at USAREUR's Joint Multinational Training Command's (JMTC) Full Spectrum Training Environment in Germany. PFC Dewey So of USAREUR's 172nd Infantry Brigade endures winter storm blasts in Paktika Province, Afghanistan, in January.

SSG Tomasz Bartoszyn (right) stands at attention beside Csm. Andrzej Wojtusik of the Polish Land Forces during a graduation ceremony at the Polish Land Forces NCO Academy in Poznan, Poland, last December. SSG Bartoszyn is the first U.S. soldier to graduate from the Polish NCO Academy.

spans the breadth of missile defense from Patriot systems deployed to Poland to operating Europe's Missile Defense command and control from Israel to Norway.

On a remote mountaintop in Turkey, a young private from Georgia wakes up to start her shift as a generator mechanic. On her first overseas deployment, this soldier maintains a 10th AAMDC radar installation, protecting American interests from ballistic missile threats. Struggling through the thick blanket of snow and sheltering her face from the wind, she tends to her business, proud to be a vital part of the President's directive to get this radar site into operation—quickly!

A few hundred miles north in Romania, a young sergeant from the 21st TSC walks through the cargo bay of a C-17, passing carefully assembled equipment pallets secured for the trip forward to Afghanistan. Mihail Kogălniceanu Airfield, known as M-K, is operated by the 21st TSC and is the most critical link in America's Northern Distribution Network to Afghanistan. Currently sustaining operations in Afghanistan, the airfield is America's most reliable strategic access point for movement in and out of Eurasia and the Middle East.

Like the rest of USAREUR, the 21st TSC is strategically placed. Soldiers of this organization are an ocean closer to Africa, the Middle East and flashpoints in Europe, and like USAREUR, this unit is positioned to use the infrastructure to launch materiel and forces by air and land across multiple COCOMs. As our young soldiers work in Turkey and Romania, their comrades from the 21st TSC provide military police support to U.S. Special Operations Command in Africa, deliver official mail to U.S. embassies in Berlin and Ankara, and provide disaster relief in Montenegro. The 21st TSC's 15,000 personnel work every day within three separate combatant commands, enabling America's operations in multiple countries.

Enabling the theater's critical lift capability is the 12th Combat Aviation Brigade, whose forces are spread from their home station in Ansbach, Germany, to bases across Afghanistan. Pilots who recently delivered humanitarian aid to villages tucked into southern Europe's most rugged mountains in Montenegro, Kosovo and Croatia likened their experiences and the terrain to what they are now facing during their current deployments to Afghanistan. During humanitarian relief operations and operational reinforcement to the Balkans and the Caucasus, a more critical similarity with the Afghan operations emerged: the hope and gratitude on the faces of those visited by America's benevolence and our Army's professional soldiers.

USAREUR's story goes far deeper than the vignettes used here to depict its immense mission. As the haunting notes of Taps ring out from Baumholder to Vicenza, and as the sun sets on USAREUR soldiers in Afghanistan, Malawi and Israel, American security interests have been advanced, one soldier at a time. USAREUR—the U.S. Army's forward strategic force—is shaping tomorrow's global coalitions, preventing future conflicts through presence and actions, and preparing to win those future conflicts by sustaining America's strategic access to the world. ★

U.S. Army New Jersey National Guard and Albanian soldiers assess the terrain during medical evacuation training of the NATO International Security Assistance Force Observer/Mentor/Liaison team at the Joint Multinational Training Center in Hohenfels, Germany.

ALWAYS ON ACTIVE DUTY.

No other line of electric vehicles offers the versatility and reliability of GEM.® Backed by 60 years of Polaris® quality, GEM® can be an essential part of your operation. Whether it's moving people or cargo, GEM® tackles any job you throw at it — like groundskeeping, maintenance or security. Plus, it's street legal,* is low maintenance and costs just pennies a day to operate. Ready to move. That's GEM.®

Visit GEMcar.com to see the entire line, find a dealer near you and schedule a demo.

GEMcar.com | 1.855.RIDE.GEM

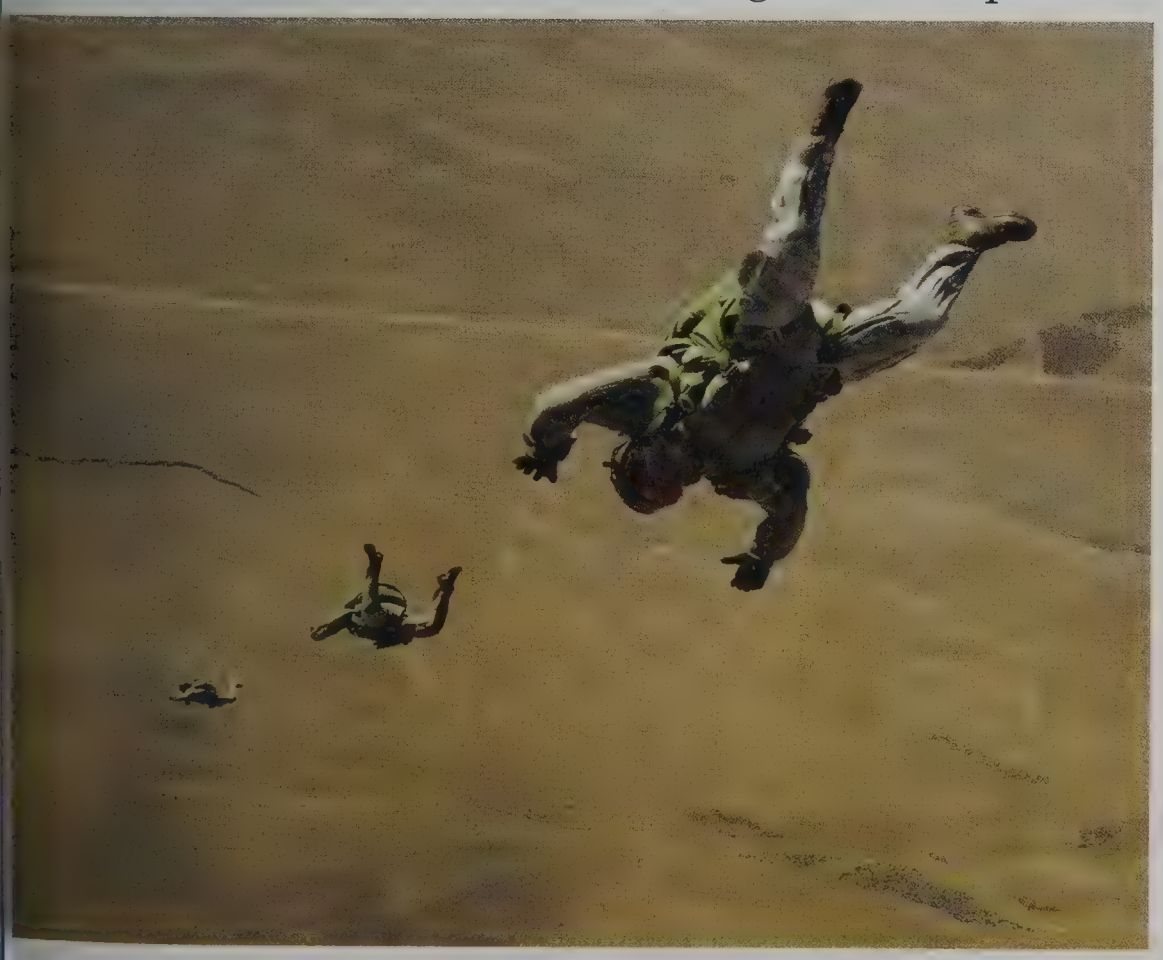
GEM

POLARIS

Army National Guard: The Operational Force Imperative

By LTG William E. Ingram Jr.
Director, Army National Guard

The Army National Guard (ARNG) of 2012 is truly a transformed operational force. During more than a decade of conflict, the ARNG has established a strong and consistent record of fulfilling constitutionally mandated federal and state missions. In the process, Army National Guard units have attained an unprecedented level of readiness. America's citizen soldiers are now the best-trained, best-led, best-equipped and most experienced they have ever been in their 375-year history. Our challenge is to keep it that way.



At nearly 358,000 strong, the Army National Guard provides strategic depth across the full spectrum of operations. In sheer numerical terms, the ARNG constitutes 39 percent of the Army's operational force at a cost of just 12.3 percent of its budget.

CSM Ed Hansen (in front of podium) accepts reports from battalions of 32nd Infantry Brigade Combat Team, U.S. Army National Guard, at the start of a 2009 send-off ceremony in Madison, Wis., for deployment to Operation Iraqi Freedom.

In this era of constrained resources, we are delivering security America can afford.

A Full Partner in the Total Army

A generation from now, those who look back at 2011 will first and foremost recall that it was the year the United States withdrew its military forces from Iraq. As we reflect on this milestone, the ARNG honors the Army Guard men and women who made the ultimate sacrifice supporting Operations Iraqi Freedom and New Dawn, as well as the thousands more who will bear the scars of that conflict for the rest of their lives. They make up the preponderance of the 690 dead and more than 17,000 wounded and injured that the Army National Guard has suffered since 9/11. We are committed to supporting them and their loved ones as they work to make their lives whole again.

As an institution, the ARNG can proudly point to its service in Iraq and Afghanistan. These conflicts were the crucible that completed the transformation of our organization from a Cold War-era strategic reserve to an operational force that is far more integral to the total Army than ever before. Mobilization for Iraq placed especially heavy demands on the Army Guard for an extended period of time. One result of the need for a constant supply of rotational forces was the development of the Army Force Generation model. This mechanism continues to provide regular, predictable rotations of ARNG troops to support contingency operations around the world and is a critical component of maintaining the ongoing readiness of the operational force.

Iraq represented another milestone as the first extended test of our all-volunteer force. Over the course of that conflict the ARNG made more than 210,000 soldier deployments. In addition, more than 80,000 deployed to Kuwait. The ARNG has deployed 56 major formations, including rotations of three division headquarters, 22 brigade combat teams (BCTs), 12 functional brigades, eight combat aviation brigades, eight sustainment brigades, two battlefield surveillance brigades and one maneuver enhancement brigade. At one point in 2005, eight of 15 BCTs in Iraq were from the National Guard; ARNG participation peaked in March of that year with more than 69,000 soldiers on the ground.

Similarly, the Army National Guard continues to contribute to the fight in Afghanistan. To date, more than 80,000 ARNG soldiers have served in Afghanistan, with a peak of more than 14,000 in July 2011. ARNG divisions and brigades have deployed 24 times to Afghanistan since 2001.

As a result, America's defense planners have come to rely upon an Army that tightly integrates the ARNG as a balanced and scalable force that is staffed, trained and equipped to engage with our partners, build capacity abroad, maintain the peace or prosecute a war. Citizen soldiers also deliver aid and comfort to those suffering from the ravages of man or nature, at home or abroad. The Army Guard is engaged as part of the joint force across the full spectrum of 21st-century operations.

With a presence in nearly 70 countries, our global footprint spans five continents. Since September 11, 2001, the Army National Guard has completed more than 500,000 soldier mobilizations in support of diverse operations including missions to Iraq, Afghanistan, the Balkans, Guantanamo Bay, the Horn of Africa, the Sinai Peninsula, Honduras, the Philippines and at home. In 2011, 45,427 ARNG men and women were deployed as part of ongoing missions around the world. At present, half of ARNG soldiers are combat veterans.

The Strength of Our Nation's Communities

The hallmark of the Army National Guard is its twin responsibilities to fulfill both federal and state missions. When not deployed, ARNG men and women reside in nearly every zip code and are directly commanded by the governors of the states and territories. A uniquely American institution, the ARNG is an efficient use of resources that affirms the role of the states in our federal republic. Since its birth a

---

LTG William E. Ingram Jr. *assumed duties as the director, U.S. Army National Guard, in November 2011. Previously he served as special assistant to the Vice Chief of Staff of the Army. He has commanded U.S., U.N. and NATO forces in Croatia, Macedonia and Kosovo, and he has had leading roles in homeland security and disaster response in the United States. A graduate of North Carolina State University, LTG Ingram was commissioned in 1972 as a distinguished graduate at North Carolina Military Academy, Fort Bragg, N.C.*

PROTEC™

HMMWV
Enhanced Mobility
Upgrade System

MISSION READY

Meritor® ProTec™ Series 30 High Mobility Independent Suspension (HMIS) is the perfect solution for dernizing the HMMWV Fleet. The Series 30 is fully validated, combat proven, and in production today ProTec Series 30 not only improves HMMWV mobility and braking performance, it also increases the gross icle weight (GVW) capability to 18,000 pounds. Even at this increased GVW, the suspension delivers improved stability, ride quality and handling as you can see on the video at meritordefense.com. The ProTec Series 30's t attribute may just be how it bolts into the existing HMMWV chassis without any major modifications needed

tor not affiliated with or endorsed by AM General LLC ©2012 Meritor, Inc.

MERITOR
DEFENSE

A soldier from 189th Engineer Team, 101st Battalion, Massachusetts National Guard, operates a front-end loader during Operation Rising Water, a statewide effort to aid communities affected by a 2010 flood.

the colonial militia, the Army National Guard has been built upon the shared values of devotion to service and selfless volunteerism.

The ARNG has demonstrated that effective equipping, combined with adequate facilities, organizational structure and training for national defense also served to prepare our forces for domestic response. Indeed, the same systems we require on the battlefield—command and control, sustainment, communications, logistical flexibility, and maneuver enhancement—all translate directly to our homeland mission.

An enduring example of the Army National Guard's flexibility in providing global and domestic forces is the response to Hurricane Katrina, the largest disaster response in American military history. At a time when 80,000 citizen soldiers were deployed overseas, the National Guard sent more than 50,000 troops from all states and territories and the District of Columbia to the storm-ravaged Gulf region.

In 2011 alone, the Army National Guard served 907,185 duty days directly tied to support of civil authorities. Citizen soldiers were on point when storms, fires and floods threatened populations and critical infrastructure—300 times a year on average since 1949. For major disasters, more often than not, it is the organic command and control of ARNG combat divisions and brigades that organize the lifesaving efforts, delivery of needed supplies, protection of property and restoration of order that Americans expect when they see their National Guard responding to an emergency.

Our command-and-control capacity is backed by real assets. The Army National Guard operates the largest fixed-wing aircraft inventory in the Army and 49 percent of the Army's operational utility and cargo helicopters. It also maintains fleets of trucks and utility vehicles that are ready for state and federal missions. Since 9/11, the Army has allocated more than $41 billion to equip the ARNG. As a result, the percentage of critical dual-use equipment on hand—equipment that can be used for both the warfight and domestic emergencies—is in excess of 90 percent of requirements.

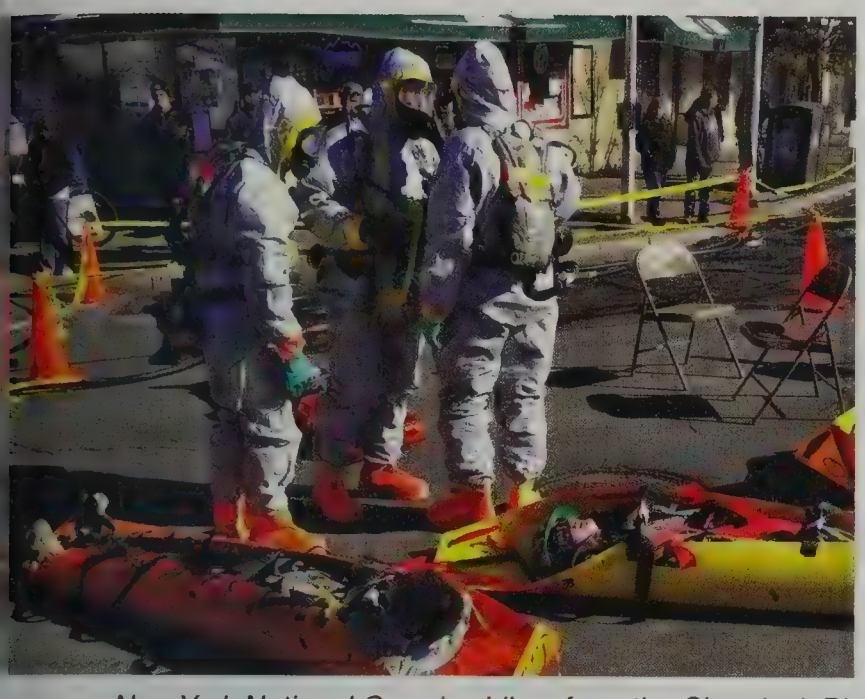
The ARNG is also postured to respond to an increasing and evolving threat to America, one that is asymmetric, unconventional and unpredictable. Should the nation suffer a chemical, biological, radiological or nuclear event, the ARNG has 10 Homeland Response Forces (HRFs), one per each Federal Emergency Management Agency region. Each of these HRFs has more than 500 personnel trained to provide timely lifesaving capabilities within six to 12 hours of an incident. These augment 57 weapons of mass destruction civil support teams (CSTs) dispersed across the country that are capable of identifying and assessing hazards, advising civil authorities and facilitating the arrival of follow-on military forces. Army National Guard CSTs conducted more than 1,720 response standby and assist missions in fiscal year 2011 alone.

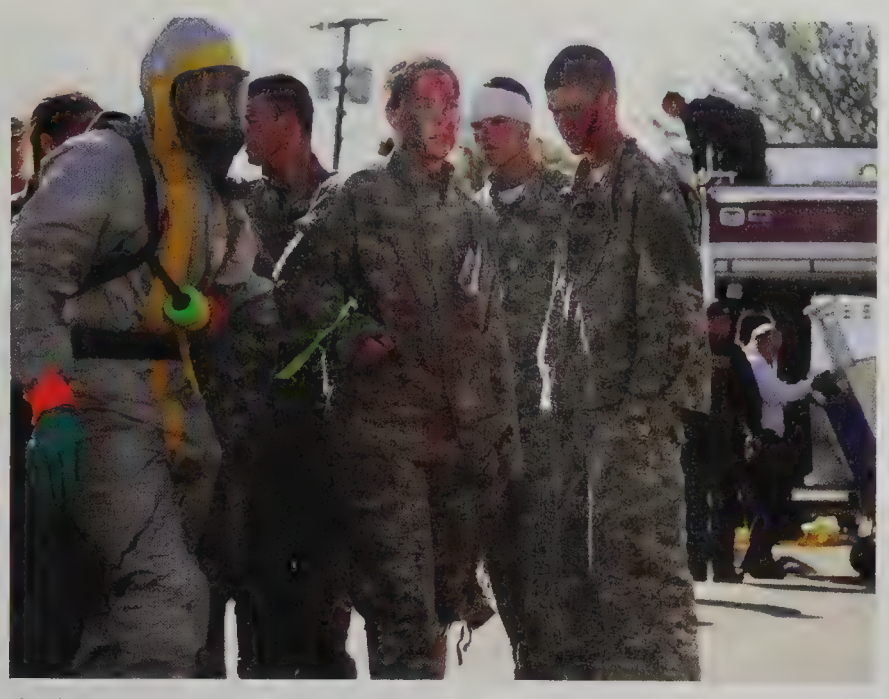
Oregon Army National Guard PFC Eric Rowley, 82nd Cavalry Regiment, and an Omani soldier scan their sectors during a January training exercise in Oman to share knowledge and build diplomatic relations.

From Theater Engagement to Cyber Warfare

An ARNG that is robust and ready for future contingencies will require continued utilization of our forces on a par with our active and reserve component peers. A proportionate role in future Department of Defense training, exercises, peacekeeping and partnership building with allied nations is essential.

Theater engagement remains a priority, even as troops draw down from Iraq and Afghanistan. The Army National Guard has great experience performing this vital mission as a result of two decades of involvement with the National Guard State Partnership Program (SPP). The SPP is a unique global engagement program that has paired individual states with more than 60 partner countries around the world. The program serves as a model for security cooperation by fostering enduring military-to-military relationships that will continue to serve the United States well into the future. It is bearing fruit today: 22 SPP nations are providing 11,000 troops in Afghanistan, and 40 SPP countries have sent 31,300 troops and military experts for United Nations peacekeeping operations around the world. SPP





New York National Guard soldiers from the Chemical, Biological, Radiological, Nuclear and High-Yield Explosive Enhanced Response Force Package program bring simulated casualties to the decontamination site during a domestic training exercise in 2011. The National Guard members trained alongside city, county and state first responders to the detonation of a simulated radiological dispersion device, known as a dirty bomb, in downtown Kingston, N.Y.

as evolved to become an important tool for combatant ommanders to use in theater engagement strategies. SPP is lso expected to play an important role in the Army Naional Guard's support of Army 2020. The ARNG is poised o use our SPP relationships with a host of Asian nations as he United States shifts focus to the Pacific region.

Other potential areas of growth, given the civilian skill ets resident in the ARNG, are in the cyber and intelligence omains. We are actively seeking to harness the brain ower of citizen soldiers who work for corporations such s Google, Cisco, Honeywell and Microsoft. These Naional Guard men and women possess a mix of civilian nd military skills that make them adaptable to national yber security missions. From foreign language experts to omputer and network wizards across the country, ARNG en and women are in the virtual trenches of the invisible yber war. Today, the ARNG provides operational intellience support to the combatant commands and combat upport agencies from home stations across the country, anks to the largest number of military intelligence personnel of any of the reserve components.

Force Structure: the Linchpin

The fundamental building blocks of the Army National uard are our divisions and brigades. The level and depth f our organization give the Army the capability and flexiility it needs to accomplish its missions and still provide tate governors the emergency response capabilities they eed. To meet current and anticipated security and emerency needs, we have built a responsive and formidable rmy National Guard based on eight divisions, 28 brigade ombat teams, eight combat aviation brigades and two pecial forces groups, along with the necessary support tructure. This baseline structure must be retained because cannot be quickly rebuilt if dismantled. It is not only inegral to providing a cost-effective capability for overseas engagements; it is also the centerpiece of the military's ability to provide timely and effective defense support to civil authorities. When responding to a hurricane, tornado, flood or wildfire, distance travelled equates to time lost, and time lost often equates to American lives lost. With the advantage of geographical dispersion across some 3,000 communities, the National Guard has been the face of the military during nearly every disaster our nation has faced from colonial times through the present.

Security the Nation Can Afford

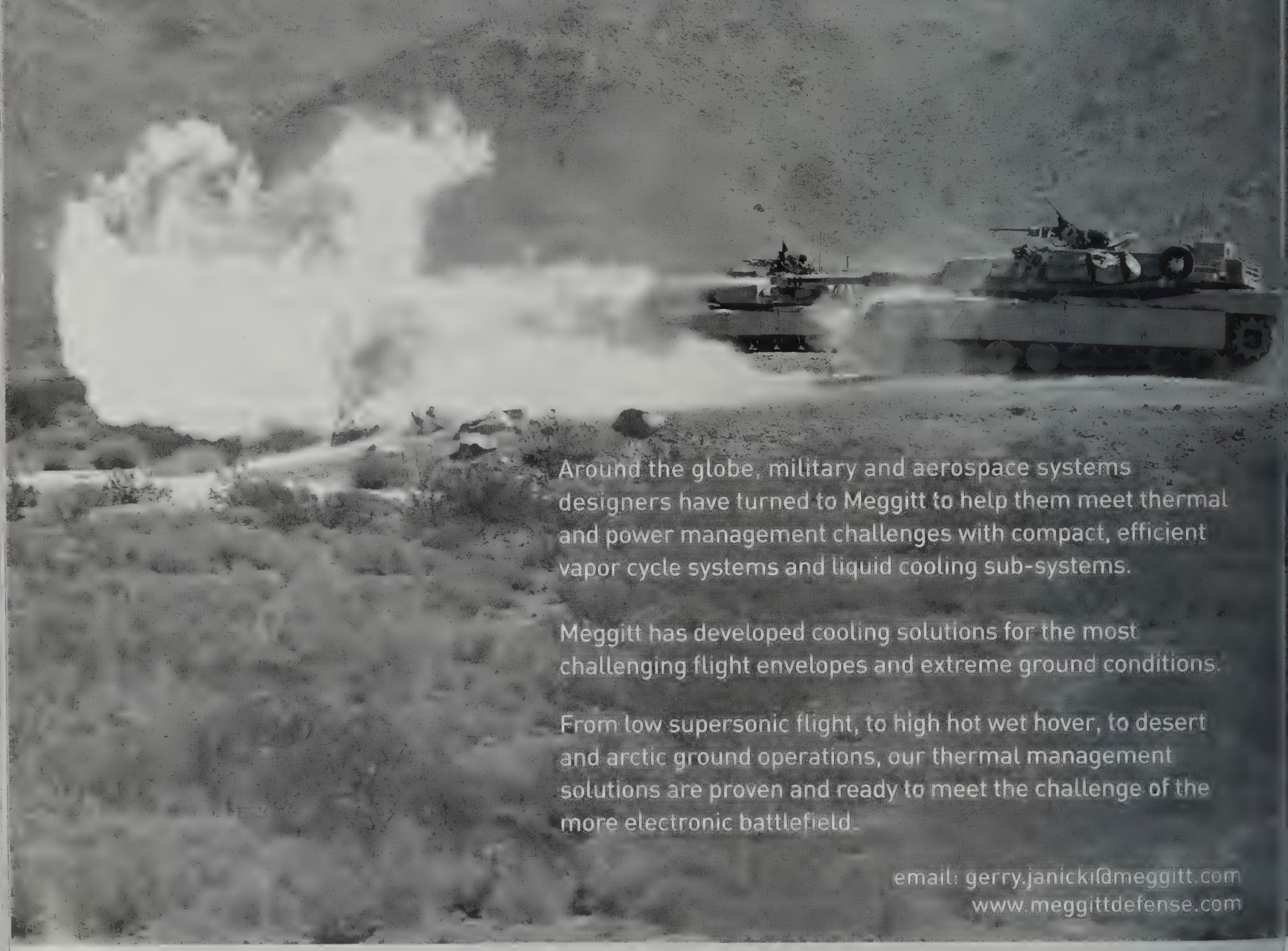
Citizen soldiers are the connective tissue that links "Main Street America" to our military. They are vital to ensuring public support for all of our brave men and women in uniform, and no segment of that American public is more critical than the fathers, mothers, wives, husbands and children who are our families. While the strength of the Army National Guard lies in our soldiers, the strength of our soldiers comes from all those who stand behind them.

The Army National Guard presents enduring value to the nation and to the communities in which we live, work and serve. Given the achievements of this past decade, the ARNG's continued participation in operations around the world, and our dedication to future missions like theater engagement, intelligence and cyberspace, I am confident in our ability to meet the challenges ahead. I can't think of a time when the Army National Guard has been more highly regarded by our fellow citizens or has contributed so significantly to the day-to-day operations of the Army.

It is imperative that the ARNG maintain the operational force we have built over the past decade and continue to hone it with regular operational deployments. Through dedication and sacrifice, the Army National Guard stands ready to meet America's security needs while steadfastly remaining good stewards of taxpayer dollars.

The Army National Guard is security America can afford. ★

Our thermal management systems improve performance, reliability and mission success.



Around the globe, military and aerospace systems designers have turned to Meggitt to help them meet thermal and power management challenges with compact, efficient vapor cycle systems and liquid cooling sub-systems.

Meggitt has developed cooling solutions for the most challenging flight envelopes and extreme ground conditions.

From low supersonic flight, to high hot wet hover, to desert and arctic ground operations, our thermal management solutions are proven and ready to meet the challenge of the more electronic battlefield.

email: gerry.janicki@meggitt.com
www.meggittdefense.com

MEGGITT
smart engineering for
extreme environments

Army Reserve 2020: An Enduring and Essential Part of the Army's Operational Force

By LTG Jeffrey W. Talley
Commanding General,
U.S. Army Reserve Command
and
Chief, U.S. Army Reserve

Following a period of continuous support to combat operations in Iraq and Afghanistan, and ongoing support to theater security-cooperation missions and military-to-military engagements worldwide, the Army Reserve has achieved unprecedented levels of readiness and integration with the Army and the joint force. The complementary capabilities we provide have proven indispensable to the total force. Our soldiers, civilians and family members, with support from our communities and employers, have helped usher in a new era of respect for and reliance on the Army Reserve as an enduring and essential part of the Army's operational force.

A U.S. Army Reserve soldier renovates a maternity delivery room at the Carcha municipality in Guatemala. Efforts by Army Reserve soldiers enabled the hospital to double its capacity to receive expectant mothers in an area with Guatemala's highest infant mortality rate.

Accomplishments

In the years since the terrorist attacks of 9/11, the Army Reserve has undergone a major transformation to provide vital capabilities to the Army to help achieve missions in Iraq and Afghanistan. We reduced headquarters structure by eliminating seven regional support commands and used that structure to build 22 operational and functional commands and four training commands. By aligning comparable functions, we harnessed readiness and maximized support to the Army and the joint force. Through this effort, driven by wartime demand for troops, the Army Reserve has successfully met more than 10 years of requests from Army and combatant commanders for operational support.

The Army Reserve has mobilized more than 200,000 personnel to support operations in Iraq and Afghanistan since 2001. We continue to build an impressive and historic record of service to our nation. Today, thousands of Army Reserve soldiers are deployed in more than 20 countries supporting combat operations, theater-security cooperation, humanitarian missions, and military-to-military training in Kuwait, Uganda, the Philippines, Latin America, the Horn of Africa and other locations worldwide.

Period of Transition

We are justifiably proud of our achievements since 9/11 and are prepared to meet the challenges of the coming years. We are entering a vital period of transition for our Army and Army Reserve. With declining budgets, a strategic shift in emphasis to the Asia-Pacific region and regionally aligned forces, as well as a broadening of focus from counterinsurgency and counterterrorism operations to the full range of military operations, the Army Reserve needs to be even more agile and adaptable. By supporting broader mission sets, maintaining the right force mix and capabilities to continue providing the best possible support to the total force, America's Army Reserve will enhance its support to the Army both in homeland and global missions, especially with recent changes in the National Defense Authorization Act 2012 facilitating access to our units.

The future will require an Army Reserve that can enable our Army to prevent, shape and win across a full range of missions. Maintaining an Army Reserve with operational flexibility and strategic depth will be essential.

Enabling Prevent, Shape, Win

Recently, Army Chief of Staff GEN Raymond T. Odierno issued his "Marching Orders" (http://usarmy.vo.llnwd.net/e2/c/downloads/232355.pdf) outlining a broad strategic framework to help preserve the status of America's Army as the world's most decisive land force. These announced changes in national strategy and a transition to a leaner, more agile Army will shape a future force characterized by depth, versatility and agility, being able to prevent conflict, shape the international environment and decisively win our nation's wars.

As a complementary force, the Army Reserve provides indispensable capabilities to the Army to ensure success within this strategy and across the full range of military operations. With our unique combat support and combat service support capabilities and soldiers who bring civilian-acquired skills and experiences to the force, we provide depth, versatility and agility to the Army, enabling it to operate simultaneously across a broad range of missions.

Prevent

The Army prevents conflict by maintaining credibility based on capacity, readiness and modernization. Credible deterrence will require ready and available Army Reserve

LTG Jeffrey W. Talley, USAR, *is the chief of the Army Reserve and commanding general of the U.S. Army Reserve Command. Most recently, he served as the commanding general, 84th Training Command (Unit Readiness), Fort Knox, Ky. He has held a variety of command and staff positions from platoon to division level, including time on the Joint Staff in Washington, D.C., and the Secretary of Defense's Reserve Forces Policy Board from 2009–12. He has deployed serveral times, most recently in 2008–09 to Baghdad, Iraq, where he developed a sustainable engineering approach that promoted social entrepreneurship to create engineering and service businesses. He has a doctorate from Carnegie Mellon University and an Executive M.B.A. from the University of Oxford.*

4.5 OUNCES DOESN'T SOUND LIKE MUCH BECAUSE IT ISN'T.

Weight and size are the enemy of speed and maneuverability, two primary factors that determine an operator's survival. So we packed 110 lumens of output into a compact, Mil-Spec hard-anodized aluminum body that comes with a click-on/off tailcap switch and a pressure-activated tape switch. Its virtually indestructible LED and Total Internal Reflection (TIR) lens produce a focused, far-reaching beam with plenty of peripheral light for situational awareness. All this power packed into a mere four inches of length, and weighing a scant 4.5 ounces. The Mini Scout—smaller, lighter, better.

SUREFIRE®

CPL Cory Taylor, a military policeman assigned to the 304th Military Police (MP) Company (Bluefield, W. Va.), competes in the Army Physical Fitness Test during the MP Warfighter Challenge at Fort Leonard Wood, Mo.

capabilities and capacity. Army Reserve soldiers, leaders, and units in operational and functional commands have a proven record as an integral part of the Army and joint force. Our training commands and regional support commands (RSCs) also enhance Army readiness by providing the right amount of support and training to soldiers and units at home and abroad.

Last fall, five teams from the Army Reserve's 200th Military Police Command competed for the first time in the Military Police Warfighter Challenge. The Reserve teams joined four Army National Guard and 28 active Army teams at this annual event that brings top military police soldiers together from U.S. Army units around the world. During the week-long competition, which pitted MP soldiers moving on foot from event to event in scenarios conducted over a range of 60 miles, the 200th MP soldiers proved their grit in complex scenarios that called on their recent battlefield experience. One Reserve team from West Virginia won the top spot for the best score during a physical fitness test with a surprise 6.5-mile run that included carrying two 35-pound ammunition cans, full-combat equipment and an individual weapon.

Events like these, and our ongoing support to security and MP operations at Joint Task Force-Guantanamo and in Afghanistan, underscore the skills and character that Army Reserve soldiers bring to the total force in both deployments and competitions. Their fortitude also reminds us that the Army Reserve is an essential part of the total force with citizen-soldiers who embody the warrior ethos.

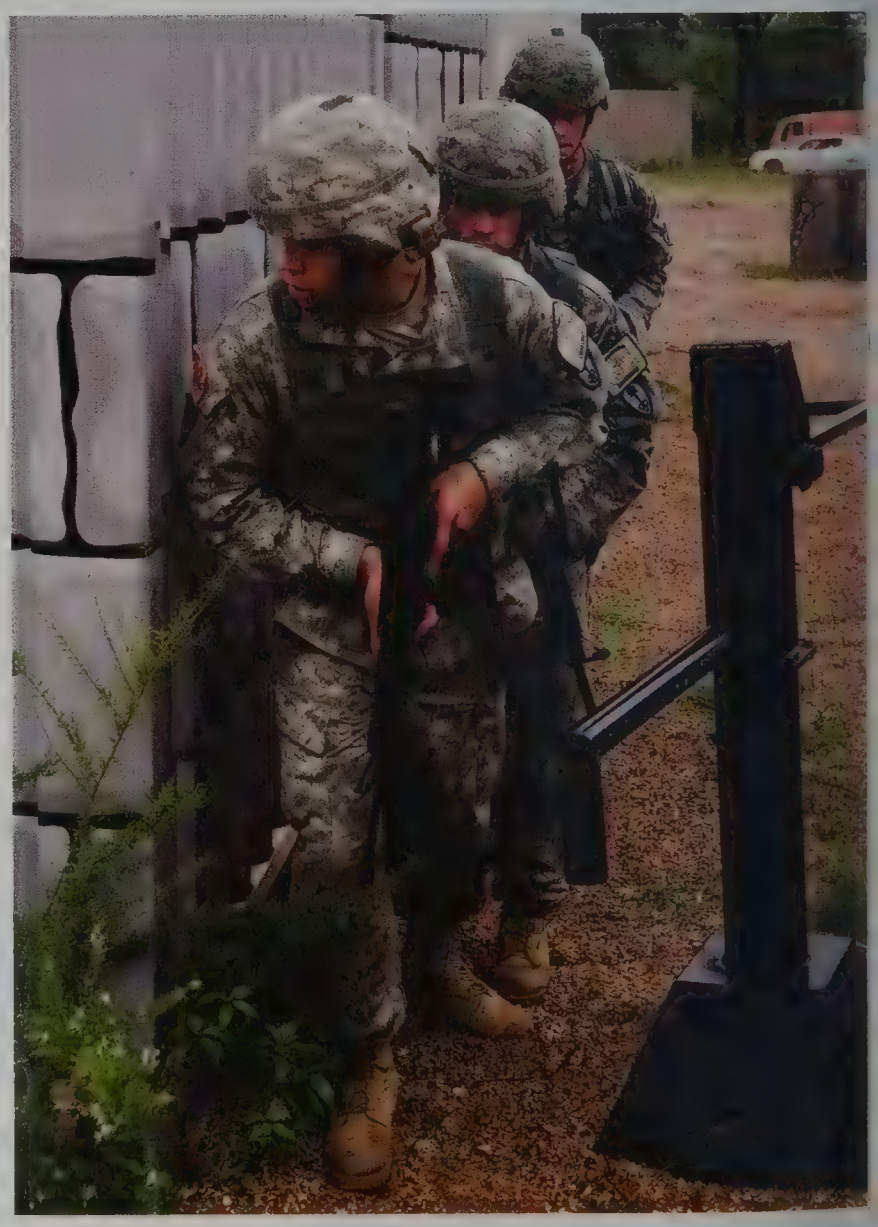
Shape

The Army shapes the international environment by sustaining relationships with other militaries, building their capacity and facilitating strategic access. Unique Army Reserve military and civilian-acquired skills and experiences facilitate strategic access, and Army Reserve participation in theater engagement helps cement relationships with friends and allies. Routine use of Army Reserve units provides continuity that helps foster enduring partnerships.

Warrior-citizens are especially suited for the human domain of operations. In remote areas of Guatemala, Army Reserve engineers assigned to 1st Mission Support Command contribute to vital humanitarian assistance missions. These Army Reserve soldiers from Puerto Rico are finishing construction projects, including a school and a hospital delivery room. Their Spanish-speaking and civilian skills in the construction industry hone their proficiency for future deployments as they forge lasting bonds with the people of Guatemala.

Win

The total force, active component, Army Reserve and National Guard make up the decisive force that will ensure victory in our nation's wars. Deployed in support of Operation



Soldiers assigned to the 391st MP Battalion (Columbus, Ohio) work through a scenario-based exercise at the 2011 Warfighter Challenge at Fort Leonard Wood. Army Reserve teams joined four National Guard and 28 active-duty teams at the week-long competition.

Enduring Freedom, Army Reserve units like the 558th Mission Control Team from Tampa, Fla., operate in one of the busiest entry-control points in Afghanistan. Reserve soldiers process and track every Afghan delivery truck and driver entering and departing Kandahar Airfield, a sprawling logistics base supporting more than 26,000 personnel.

In more than 10 years of continuous combat the Army Reserve has been transformed into a flexible and rapidly deployable force. In an increasingly complex strategic environment, the Army Reserve stands prepared in defense of the nation at home and abroad.

With strong leaders—girded by strong values and the warrior ethos—and a decisive, professional force, our Army is prepared to face an uncertain and complex strategic environment.

Looking Ahead

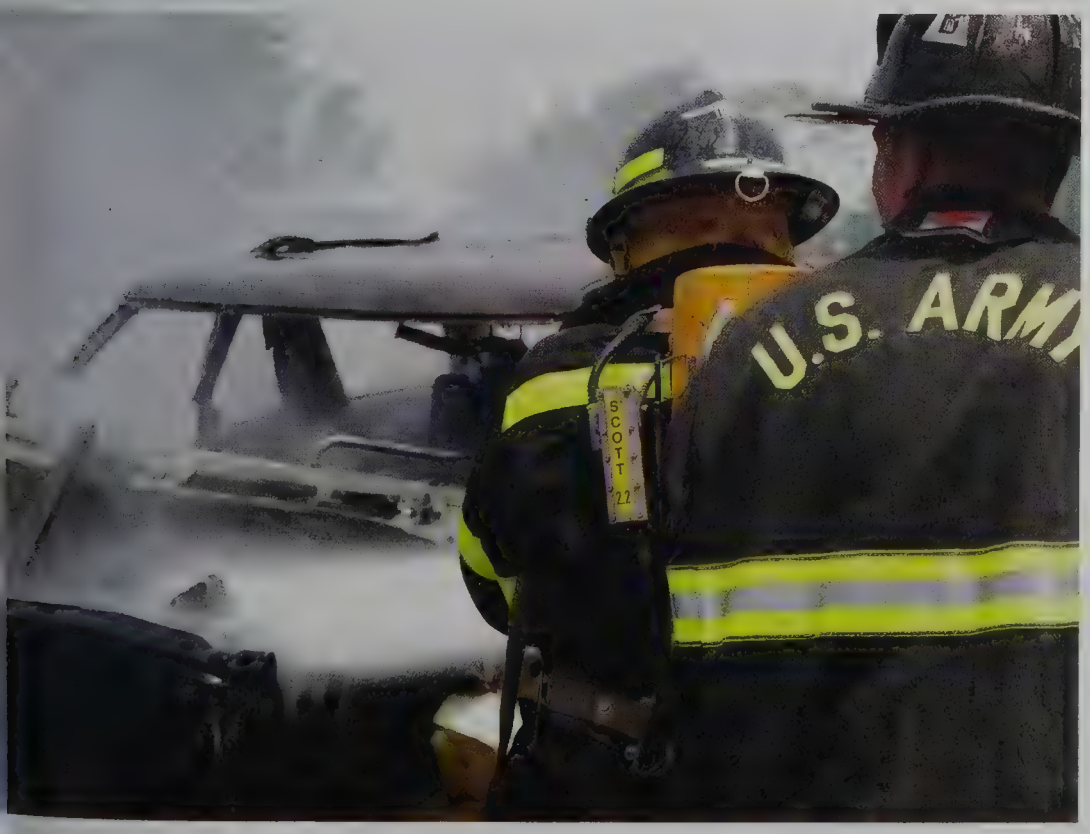
The Army Reserve is a complementary force that will remain engaged around the world to support the Army and the joint force as an operational reserve. Given fiscal realities and a shift in strategic focus, it is essential that we remain good stewards of resources to manage the force and preserve readiness for the full range of military operations.

My strategic priorities for the Army Reserve are:

- Provide trained, equipped, ready and accessible soldiers, leaders and units to the total force in support of the full range of planned and contingency operations.
- Develop Army Reserve 2020 as a versatile mix of enabling capabilities as part of Army 2020 and Joint Force 2020.
- Sustain our high-quality, volunteer Army Reserve composed of resilient soldiers, civilians, and families representing the best of America's private and public sectors.
- Foster growth of adaptive leaders in the Army profession to meet 21st-century requirements—including training, education and experience in joint, interagency and other broadening assignments.
- Sustain and enhance total Army capability through employer partnerships and an innovative force mix that facilitate movement of soldiers between active and reserve duty across a continuum of service.
- Foster a culture of cost management in the Army Reserve that guarantees effectiveness while achieving business efficiencies and readiness for audits.

I have my marching orders from Army Chief of Staff GEN Odierno. My troops are at Rally Point 32 (http://www.usar.army.mil/resources/Media/RallyPoint32_WEB%20v.2.pdf) and moving towards objective Army and Joint Vision 2020. The Army Reserve stands ready to remain America's enduring operational reserve force of decisive action.

Twice the Citizen, Army Strong! ★



Army Reserve firefighters extinguish a burning car. The National Defense Authorization Act 2012 authorizes access to Title 10 reserve forces for involuntary activation to provide assistance in case of major disaster or emergency.

C-37B

Uniquely Configured G550 for the U.S. Government

Mission Ready

More Gulfstream aircraft perform government and military service than any other large-cabin business jet in the world. Though the missions vary, the requirements are resolute: unsurpassed performance and proven reliability. With the expertise of our Special Missions Program office and collaboration with technology partners for advanced equipment integration, be assured, whatever your mission, we're ready when you are.

SAMS | +1 703 276 9500 | GULFSTREAM.com/specialmissions

Gulfstream®
A GENERAL DYNAMICS COMPANY

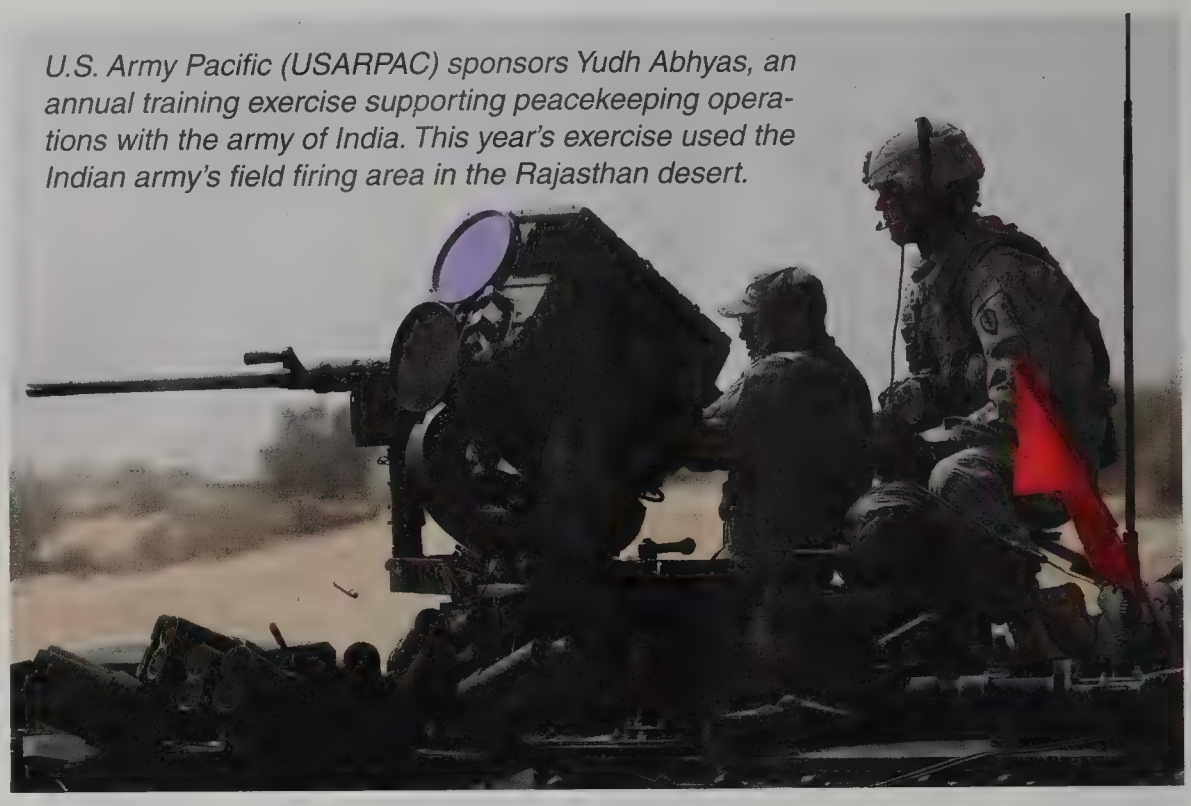
Building Credibility, Confidence And Trust Through Engagement In the Pacific

By LTG Francis J. Wiercinski
Commanding General, U.S. Army Pacific

America's new strategic focus acknowledged the significance of the Asia-Pacific region when the Department of Defense announced the 2012 defense strategic guidance for the 21st century in January.

U.S. Army Pacific (USARPAC) understands the importance of forward presence in the Pacific for fulfilling the President's new strategic guidance. The presence and posture of the U.S. Army in the Pacific sustains, improves and strengthens our military alliances and partnerships throughout the region. Consistent and reliable engagement through frequent exercises demonstrates the United States' intent to be a trusted partner across the human domain.

As America's largest theater Army and as the



U.S. Army Pacific (USARPAC) sponsors Yudh Abhyas, an annual training exercise supporting peacekeeping operations with the army of India. This year's exercise used the Indian army's field firing area in the Rajasthan desert.

Army service component command (ASCC) for U.S. Pacific Command (USPACOM), USARPAC is expanding efforts to carry out its responsibilities in executing the defense strategic guidance and ensuring regional access. Global audiences factor decisively into USARPAC's initiatives that take a multilateral approach to security, cooperation, and growing partnerships and relationships.

Legacy of the U.S. Army in the Pacific

The U.S. Army has an enduring legacy in the Asia-Pacific region, fighting 63 campaigns there since 1899—more than any other geographical region outside the Americas. Today, U.S. Army Pacific projects the depth and sustainability to prevent conflicts first and foremost, promote the conditions necessary to maintain peace and stability, and prevail in conflicts when all other courses of action are exhausted in the Asia-Pacific region.

To contribute to this renewed Asia-Pacific focus expressed by President Obama and Secretary of Defense Leon Panetta, the Army's Pacific theater strategy operationalizes four core tenets: persistent engagement, forward presence, trained and ready forces, and agile Mission Command. Working in concert, these four tenets enable USARPAC headquarters, with its major subordinate commands and theater-enabling commands, alongside other USPACOM components, to engage allies and partners in theater to prevent instability and set conditions to rapidly respond to a full spectrum of contingencies and, if necessary, win in combat.

Engaging the theater and working alongside partners is USARPAC's first line of effort to enable America's Army in the Pacific to work by, with or through allies and partners to deter aggression, build capacity and ensure U.S. Pacific Command access.

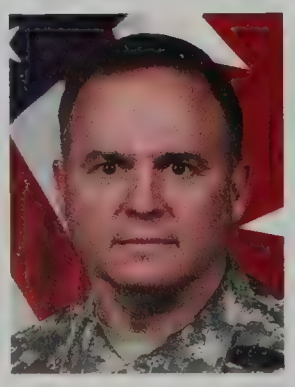
USARPAC is America's theater Army in the Asia-Pacific region, supporting the attainment of national strategic, theater strategic and operational objectives. USARPAC is designed and positioned to conduct operations indispensable in enhancing the joint force's ability to gain and maintain access to areas throughout the region that would otherwise be denied. USARPAC's long-standing relationships and engagements in theater, coupled with its forward presence of trained and ready forces, combine to provide our Pacific allies and partners a reliable and capable security partner. The level of interoperability and cooperation achieved through these Army-to-Army relationships is unparalleled among the U.S. military services in the Asia-Pacific theater.

Sharpening Our Edge While Projecting Presence

A major element of USARPAC's engagement effort is to ensure our Army uses training opportunities that are the hallmark of the Asia-Pacific theater. As our forces return from Afghanistan, USARPAC's exercise and engagement program will offer the U.S. Army regional alternatives that complement home station and combat training center rotations as the third essential component of the theater training strategy triad. These high-fidelity training evolutions in theater will serve the dual purpose of maintaining the Army's combat edge and enhancing our Army's presence in theater by training in the theater.

USARPAC's partner armies offer realistic training in almost every climate, terrain and environment necessary to maintain unified land operations readiness, whether it be bilateral or multilateral field training exercises, or getting soldiers to partner-nation schools that hone skills in high-altitude mountain, desert and jungle warfare. These training and educational opportunities not only increase unit readiness, but also provide unit staffs, officers, noncommissioned officers and enlisted soldiers with the cultural awareness and familiarization necessary to operate in overseas contingencies with future coalition partners in joint, interagency, intergovernmental and multinational operations. Our Army

---



LTG Francis (Frank) J. Wiercinski *is the commanding general of U.S. Army Pacific. A 1979 graduate of the U.S. Military Academy, he has commanded at every level. He has served as the deputy regimental commander, 75th Ranger Regiment, Fort Benning, Ga.; deputy commanding general (Support), 25th Infantry Division; and deputy commanding general, U.S. Army Pacific, Fort Shafter, Hawaii. Staff assignments included director of regional operations, Special Operations Division (J-3) The Joint Staff; and principal director, Near East-South Asian Affairs, Office of the Secretary of Defense. LTG Wiercinski most recently served as the commanding general of U.S. Army-Japan and I Corps (Forward), Camp Zama, Japan, and as the acting senior commander for Fort Campbell, Ky. He is a graduate of the Command and General Staff College and the Army War College.*

Show your pride

SIG SAUER® Commemorative Program

Available to all law enforcement, federal agencies and military personnel. SIG SAUER extends a special discounted price and free custom engraving. Minimum order of 25 pistols (same model and caliber).

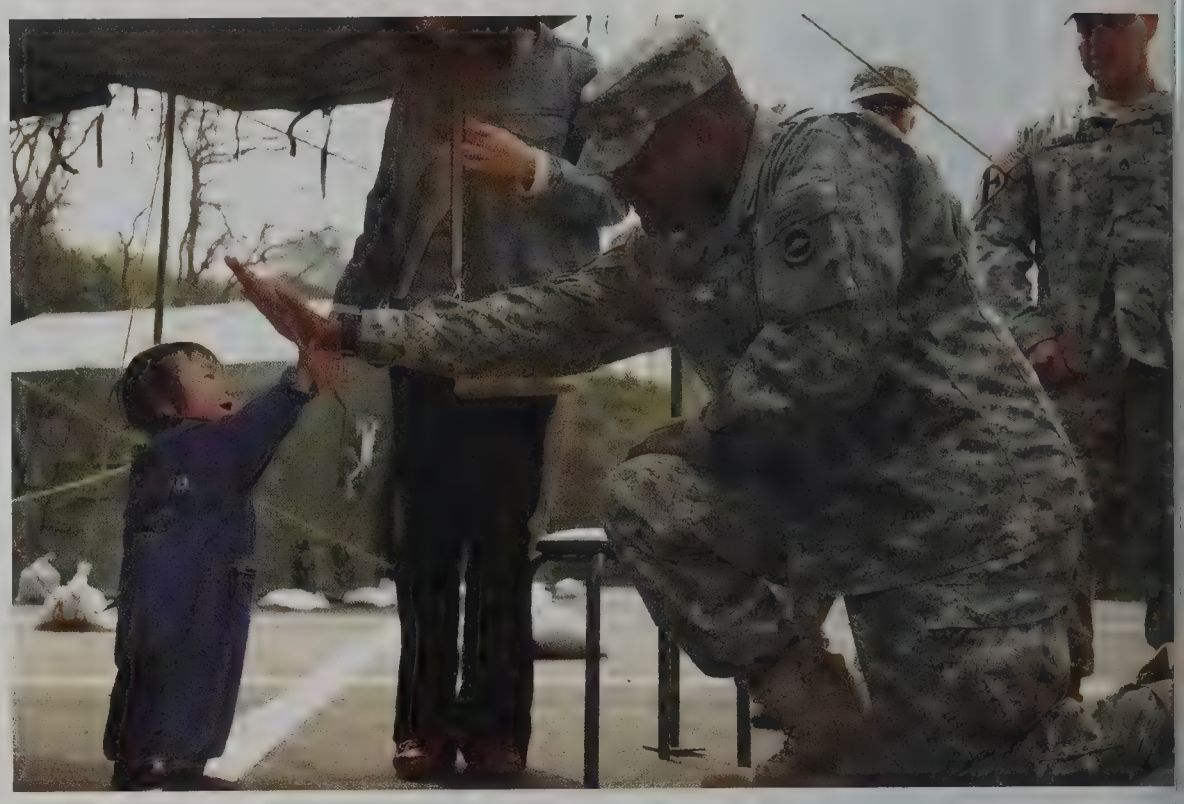
Special features include:

- SIGLITE® Night Sights (pistols)
- 3 Magazines (pistols)
- Lockable gun case
- Gun lock
- Manual

Available Models:
P220®, P226®, P229®, P232®, P239®, P250®
1911, SP2022® and SIG SAUER rifles.

For more information visit:
http://www.sigsauer.com/LawEnforcement/Le-Mil-Unit-Commemorative-Program
or send an email to:
commemorativesales@sigsauer.com

SIG SAUER
when it counts



MG Michael T. Harrison Sr., commanding general of U.S. Army Japan and I Corps (Forward), greets a toddler during USARPAC's humanitarian assistance and disaster relief operation following the March 2011 earthquake and tsunami in Japan.

trains hard daily on Pacific terrain, and we will operate with, and potentially fight alongside, Pacific partners should our deterrence efforts fail.

Building Credibility, Confidence and Trust

As America's national leaders have noted, no nation or government can "surge" trust and influence among its allies and partners. Building and maintaining credibility and confidence make up a deliberate process that occurs over years of interaction after numerous iterations. It starts with establishing and maintaining a rotational presence to develop familiarization, situational awareness and mutual understanding among our military partners.

USARPAC's annual bilateral and multilateral exercises give the Army regional presence and demonstrate credibility in our alliance and partner capabilities. Combined with senior-level interaction, seminars, advisory and expert exchanges, humanitarian assistance and disaster-response training, and real-world crisis-response operations (such as USARPAC's contributions to Operation Tomodachi, the U.S. response to the March 2011 earthquake and tsunami in Japan), U.S. Army Pacific engagement activities build trust and preserve and raise confidence among our allies and emerging partners in our commitment to the region's security.

During Balikatan 12, an annual bilateral training exercise in the Philippines, USARPAC teams assisted in civic building projects and provided medical and dental care. The exercise included a command post exercise and field training exercises.

The U.S. military remains the security partner of choice in Asia and the Pacific. While the United States and its Army in the Pacific enjoy a high degree of confidence and minimal restrictions on access among our regional partners today, that confidence and trust come from a stable, dependable and committed Army relationship that provides both utility and benefit. For decades, regional Army senior leaders have recognized the importance of preserving and growing these fragile and perishable relationships to maintain trust, and USARPAC remains committed to fulfilling that trust.

To support these goals, USARPAC conducted 134 total engagements with 34 countries in 2011. Of these, 40 were executive engagements in 18 different countries, 24 exercises were held with 14 countries and subject-matter expert exchanges were held with 19 countries. In addition, the Asia-Pacific Counter-Improvised Explosive Device Center conducted 70 training missions with seven countries.

Agile Mission Command Capability

This capability empowers the USARPAC commander to understand, visualize, describe and directly respond to any immediate crisis or contingency. This includes not only contingency response but also evacuation operations, foreign or domestic humanitarian assistance, disaster relief, or peace operations. With capabilities ranging from the rapidly deployable contingency command post to forward-positioned Army headquarters in Japan, Alaska and South Korea, USARPAC is positioned to provide rapid response during times of need.

This reach was evident during Operation Tomodachi. USARPAC, through U.S. Army Japan, provided humanitarian assistance and disaster relief support alongside the Japanese Ground Self-Defense Forces

while simultaneously deploying the contingency command post to serve as the joint task force headquarters during Exercise Balikatan 2011 in the Philippines.

Another example occurred in November 2011, when a medical assessment team from the 65th Medical Battalion stationed in South Korea deployed to the Kingdom of Thailand to provide humanitarian assistance and disaster-relief support alongside the Royal Thai army during that country's devastating floods. USARPAC forces are prepared for the unpredicted disaster that can strike any day throughout their 9,000-mile area of responsibility that stretches from California to the Maldives.

Forward Presence

Soldiers with U.S. Army Alaska (USARAK) support the strategic reach imperative for this vast region. The 4th Brigade Combat Team (Airborne), 25th Infantry Division, specializes in parachute assault to secure key objectives for follow-on military operations. USARAK also is home to the Northern Warfare Training Center, the U.S. Army's Arctic, subarctic, and mountain environment training area, which is vital for preparing soldiers for Afghanistan or the freezing cold of the Korean Peninsula. Soldiers in Alaska are relevant to the success of training throughout Asia and the Pacific, as demonstrated by USARAK's participation in Exercise Yudh Abhyas with the Indian Army.

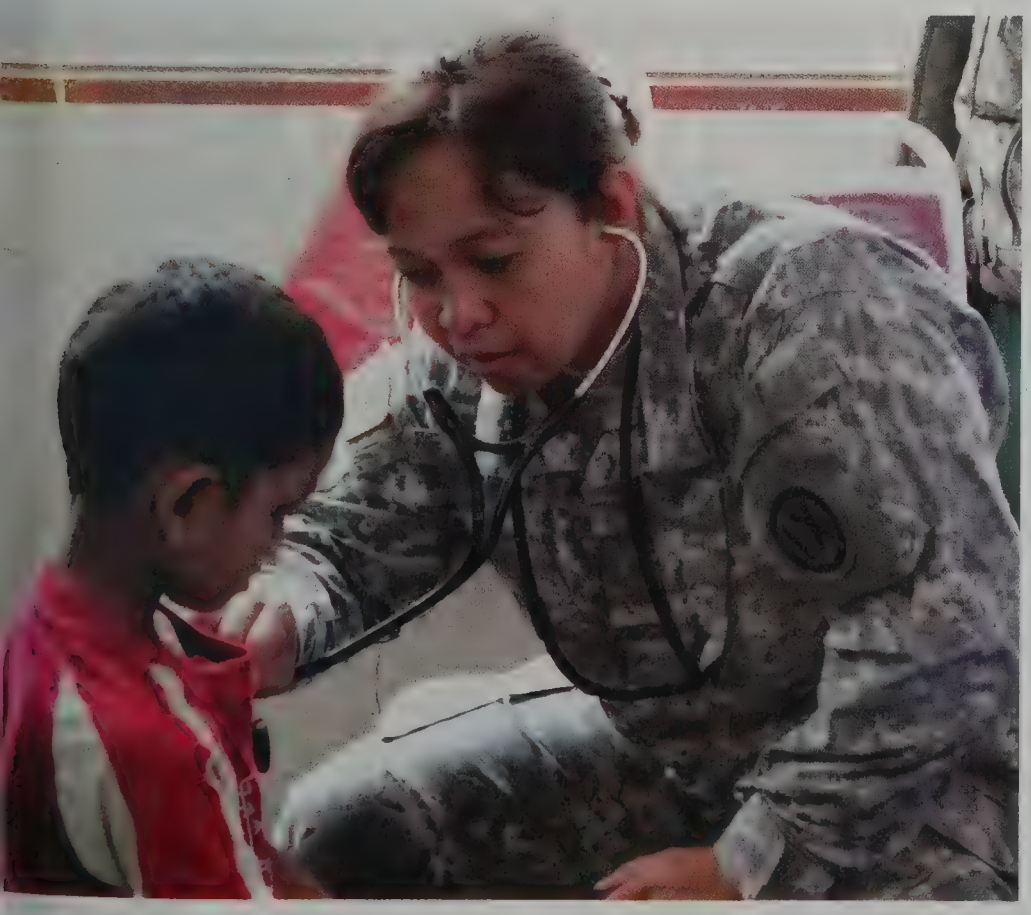
Forward deployed on the Korean Peninsula is Eighth Army, a warfighting headquarters that closes the gap across the Pacific Ocean for the U.S. Army. Units throughout USARPAC participate with Eighth Army in the largest biannual exercises in the U.S. Defense Department. Our capability to support land operations in South Korea and interoperate with South Korea army forces have been validated and refined this past year.

Soldiers of USARPAC live in the Asia-Pacific region and understand the challenges of this complex environment. Understanding that environment enhances our ability for engagement, deters any potential adversary, and demonstrates our capabilities to friends and adversaries. Our forward presence guarantees ready access to potentially contentious areas and allows U.S. and allied forces to achieve positional advantage and deployment momentum. Our regional allies and partners place trusted value in our 70,000 soldiers, 11,400 Army civilians and 78,000 family members stationed in Alaska, Japan, South Korea, Hawaii and Joint Base Lewis-McChord, Wash.

Soldiers train in the snow at the Northern Warfare Training Center based at Fort Wainwright, Alaska. U.S. Army Alaska's NWTC trains soldiers in military operations in cold and mountainous regions in support of expeditionary operations.

Confidence in the U.S. Army's commitment to build strong relationships throughout Asia and the Pacific in the future is bolstered with construction of a new command center at Fort Shafter, Hawaii. The new 21st-century command center will dramatically increase USARPAC's capacity to communicate and respond and further demonstrates improving agile Mission Command capabilities. USARPAC, as the single ASCC of the Pacific Theater, and Eighth Army as the Army forces to U.S. Forces Korea, further enhance Mission Command in this critical area of operations.

USARPAC continues to develop an ironclad relationship of trust with its land partners in Asia and the Pacific. This trust extends to its own soldiers, civilians and family members as USARPAC continues to care for the force and provide presence in support of the defense strategic guidance. ★



MAJ Cynthia Copp conducts a checkup on a boy from a rural Malaysian village during Keris Strike 2011, a bilateral exercise with the Malaysian army that focuses on strengthening ties and increasing interoperability between the two countries.

THE ULTIMATE HEAD PROTECTION

The ultimate protection from trauma—

Blunt force, blast and ballistic.

With a lightweight wearability...

That allows for peak performance.

INTRODUCING BATLSKIN

THE WORLD'S FIRST FULLY INTEGRATED, FULLY MODULAR HEAD PROTECTION SYSTEM

More science. More technology. More protection. Less weight.
And you can tailor the system to the mission.
So a soldier can do what a soldier does.

REVISION READY.

REVISION

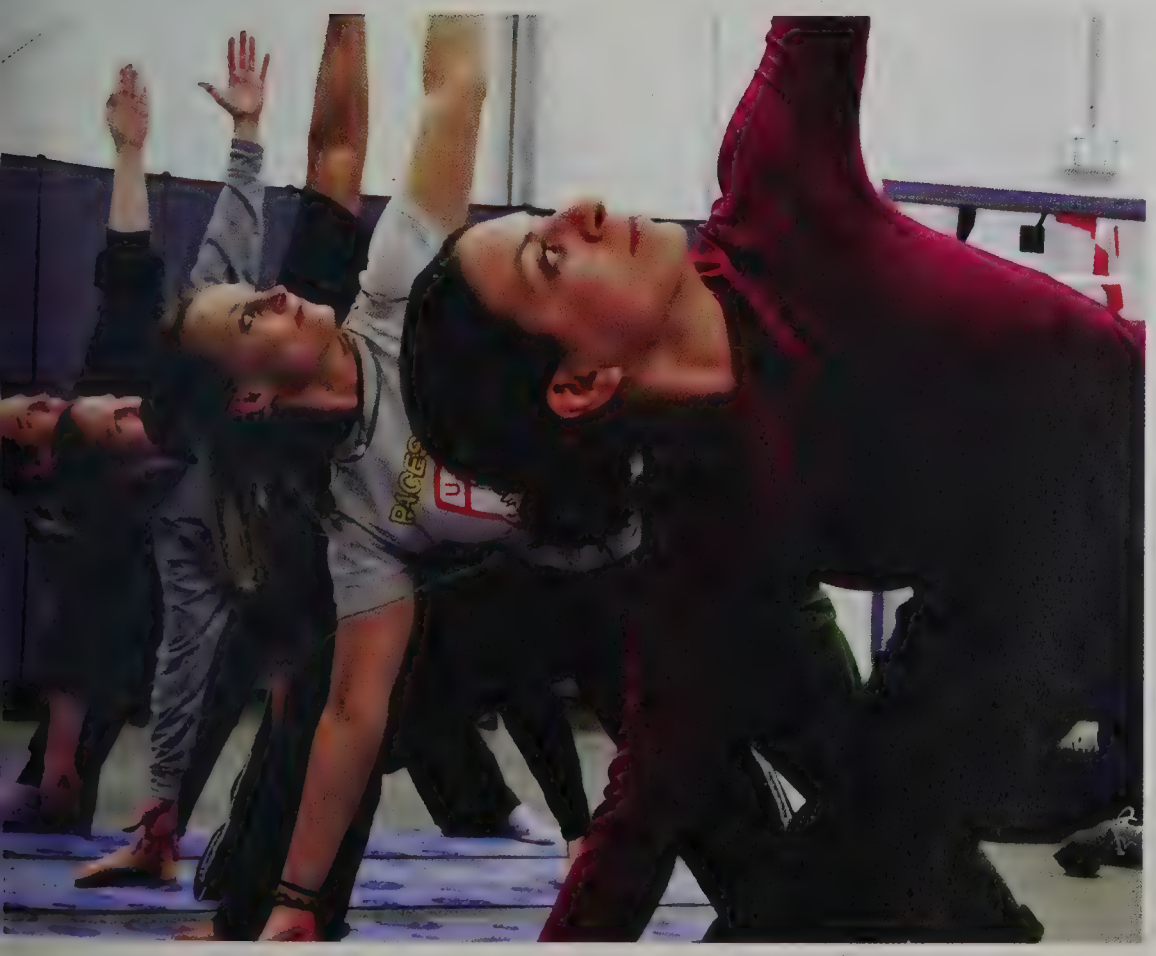
™ & © [illegible] Batlskin
[illegible] TRADEMARK OWNED BY VISION SYSTEMS [illegible] AND USED UNDER LICENSE BY REVISION MILITARY, INC. BE REVISION READY. AND RE[illegible]
[illegible] REVISION MILITARY, INC. CORPORATE DRIVE, ESSEX JUNCTION, VT 05452 USA.

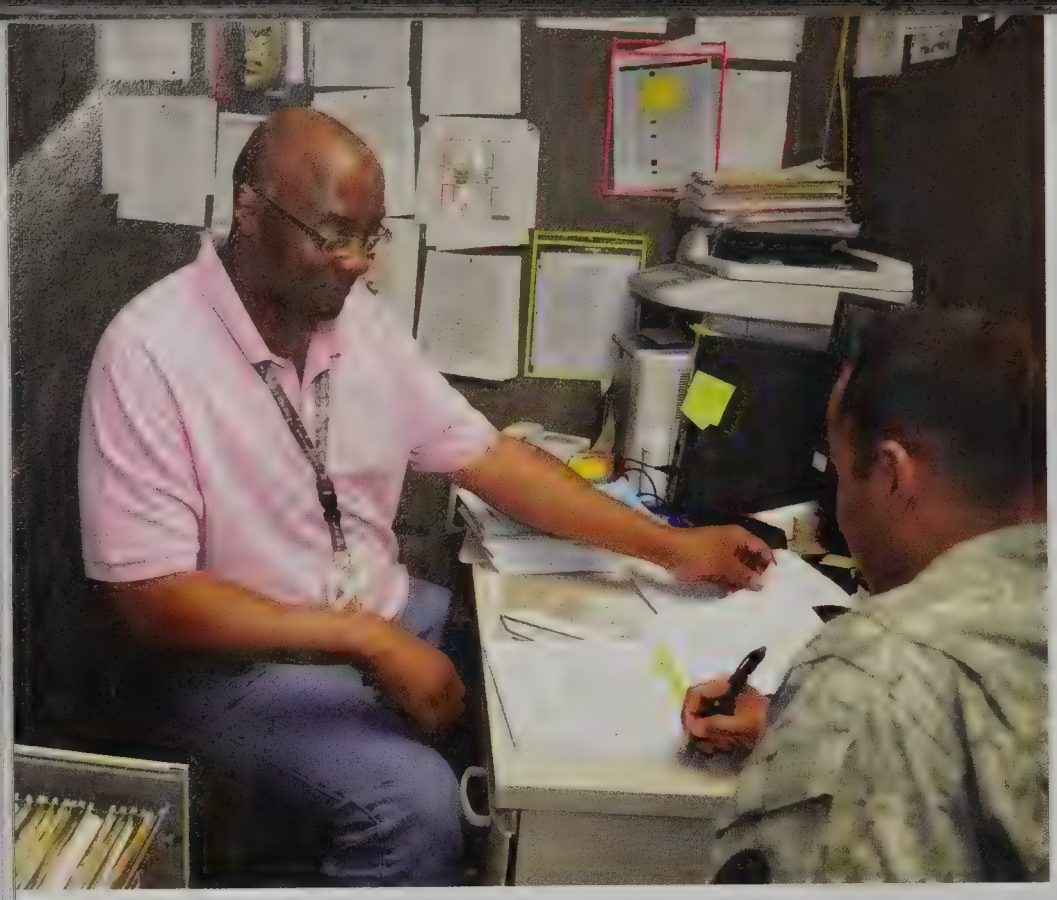
Army Medicine:
Improving Comprehensive Care
For the Army Family Worldwide

By LTG Patricia D. Horoho
Commanding General,
U.S. Army Medical Command
and
The Surgeon General of the Army

For 237 years Army Medicine has served and partnered with soldiers, families and retirees in support of their health, fitness and readiness. As a learning organization we have evolved with the demands of the times and continue to make significant contributions to global health care, medical research and training on the heels of supporting almost 11 years of persistent conflict on two major fronts.

While the wounds of war have been ours to mend and heal, Army Medicine has not lost sight of the unique opportunity to look toward the future and the establishment of a new course of medicine and health. Our goal is to become a global system for health. We want to engage the Army family—soldiers, retirees, family members and civilians—





Harvey Holt, a physical evaluation board liaison officer at the Carl R. Darnall Army Medical Center Medical Evaluation Board Clinic at Fort Hood, Texas, reviews documentation with a soldier who is going through the Army's Integrated Disability Evaluation System.

in conversations about health in support of greater readiness and better living. This goal complements what we execute today—health care at home and wherever the Army deploys—and does not change the mission to care for soldiers, families and retirees in traditional health-care settings.

As we have so proudly done for the past 237 years, Army Medicine will forge a path of military health on the foundation of its rich legacy of service and caring. Our new health destination, "Lifespace," is where we as an Army will create a healthier Army family and the Army of 2020. Long-term success in Army Medicine lies in our ability to affect the Lifespace. We understand the health-care encounter to be an average interaction of 20 minutes, approximately five times each year. Thus the average annual amount of time with each patient is 100 minutes, which is a very small fraction of one's life. In between the 100 minutes of appointments is the Lifespace, which is when we believe health really happens and when we desire a different relationship with soldiers, families and retirees. We want to go beyond the boundaries of our medical treatment facilities—both physically and virtually. In other words, we want to partner with those entrusted to our care regarding the other 525,500 minutes of the year when people are living their lives and making their health choices.

LTG Patricia D. Horoho *is commanding general of U.S. Army Medical Command and the Surgeon General of the Army. Previously she was the deputy surgeon general, Office of The Surgeon General. Before that she served as the 23rd chief of the U.S. Army Nurse Corps and commander of Western Regional Medical Command, Fort Lewis, Wash.; Madigan Army Medical Center, Tacoma, Wash.; Walter Reed Health Care System, Washington, D.C.; and DeWitt Health Care Network, Fort Belvoir, Va. LTG Horoho earned her Bachelor of Science in Nursing from the University of North Carolina at Chapel Hill and a Master of Science degree as a clinical trauma nurse specialist from the University of Pittsburgh. She is a resident graduate of the Army's Command and General Staff College and the Industrial College of the Armed Forces, where she earned a Master of Science degree in National Resource Strategy.*

Comprehensive Behavioral Health System of Care

Army Medicine has made significant advances in caring for soldiers and families dealing with the stressors of war for more than a decade. Since 2007, we have doubled the number of behavioral health providers, optimized our behavioral health resources and hired more providers for our Patient-Centered Medical Homes to meet the demand and ensure the highest quality of care for soldiers and their families. We will ensure that seeking help for behavioral health is as routine as seeking help for any other readiness function by promoting it as an integral part of a healthy lifestyle.

Because we know multiple deployments and family separations can challenge individuals, marriages and relationships, the near-term goal of our Comprehensive Behavioral Health System of Care (CBHSOC) is to implement routine behavioral health screening points across Army Force Generation and standardize our screening tools.

We also continue to improve our coordination with the Department of Veterans Affairs, local and state agencies, the Defense Centers of Excellence, the National Intrepid Center of Excellence, and other external agencies to ensure enhanced access to behavioral health-care services for soldiers and their families.

Thousands of servicemembers and their families struggle with post-traumatic stress and often find it difficult to ask for help. These experiences are the solemn reminders that give us an unprecedented opportunity to teach generations of soldiers how to live with what they cannot forget. As a society and as an army, we must be able to provide care for these invisible wounds of war for the long term. Collectively, we need to break the silence. Leaders especially have the responsibility to encourage anyone who needs help—soldiers, families and veterans—to have the courage to seek it. Asking for help may be difficult for some, but it is necessary in our deliberate efforts to identify and mitigate the risks that can lead to catastrophic outcomes. Soldiers and families must realize that behavioral health issues—specifically those that result from deployment—are treatable and curable with available care. The majority of servicemembers treated for behavioral health issues return to productive and engaging lives and remain on active duty.

Behavioral health is an area in which the Army is not willing to compromise, and the level of effort continued in fiscal year 2012, with a robust budget that is currently resourced through 2017. The Army also enhanced behavioral health services provided to family members through its Child, Adolescent and Family Assistance Centers and the school behavioral health programs.

Visit us at
AUSA - Booth #2933

We give you the freedom to move sure-footedly through tough terrain.

From defending our freedom to protecting our environment, SRC offers what few companies can: ferocious determination and agility to solve the toughest problems. Together with SRCTec, our manufacturing subsidiary, we continuously reinvest in our people and technologies. This ensures you get the brightest minds, working in the most creative environment, to design and manufacture the smartest solutions. One thing we don't do is tell you what's merely possible. We help you go beyond it.

Visit www.srcinc.com to find out more.

Redefining possible

SRC

Defense • Environment • Intelligence

12 SRC, Inc. All rights reserved.

Army Medical Innovations

Our expertise and medical innovations, born from lessons learned in combat, are the standard of care for soldiers on the battlefield and civilian health care around the world. In coordination with the National Institute of Mental Health, the Army is conducting a five-year study through 2014—the Army Study to Assess Risk and Resilience in Servicemembers—on the factors that help protect soldiers' mental health and those factors that put it at risk.

The National Institute of Mental Health study and the Walter Reed Army Institute of Research project on suicide ideation are two examples of our collaborative research initiatives. These efforts provide the Army and U.S. Army Medical Command with evidence-based information to help identify potential suicide risk factors so as to better shape our suicide prevention and intervention programs.

Army Medicine's CBHSOC campaign plan improves and standardizes access to behavioral health across the Army. Currently, there are 23 CBHSOC programs to help the Army better identify, prevent, treat and track behavioral health issues affecting soldiers and other members of the Army family.

Through our Comprehensive Pain Management Campaign Plan, the Army established centers of excellence for pain management and education within each of our regional medical commands to provide state-of-the-art, evidence-based, outcome-oriented and cost-effective care for soldiers and family members who suffer from acute and chronic pain. Our holistic approach to pain management now includes yoga, meditation, hypnosis, acupuncture, massage therapy, biofeedback and other alternatives to better manage pain, promote health, and decrease the need for medication for soldiers and families.

Pharmacists are now assigned to our warrior transition units (WTU) to provide close medication management support to optimize use of psychotropic and pain medications and reduce risks for soldiers. Our success with assigning pharmacists to the WTUs led to the expansion pilots program, whereby brigade combat teams at 10 installations were embedded with behavioral health providers to aid in communication with commanders and soldiers to enhance patient safety and optimize care. This led to approximately a 70 percent reduction in soldiers being medically unready for behavioral health reasons, a statistically significant reduction in high-risk behaviors during the postdeployment period and a 32 percent reduction for inpatient psychiatric care.

Through advanced research and innovation, Army Medicine leads the way in the early recognition and treatment of traumatic brain injuries (TBI)—medical innovation that is helping to save lives and improve the quality of life for soldiers and civilians. We continue to collaborate and use partnerships with important DoD, Veterans Affairs and civilian agencies to improve the Army's ability to diagnose, treat and care for soldiers and families affected by TBI.

Health of the Force

We have not wavered from our responsibility to provide the best health care to America's sons and daughters serving our nation. Our combat experiences strengthen our capacity, resolve and commitment to identify and treat not only the wounds that we see but also the invisible ones. As we look to the health of the force, we know our vast experience in health care allows us to heal the soldier. This translates into more than 95 percent of our soldiers surviving their wounds, recovering more quickly, and returning to their units or making the transition to civilian life. We understand that adequacy in the performance triad—sleep, nutrition and activity—improves daily performance and helps to decrease the incidence of chronic disease conditions over time. Subsequently, our programs targeted at the performance triad will promote resiliency and cognitive thinking and decrease weight gain, irritability, and debilitating diseases like diabetes and heart disease.

The Army is currently caring for more than 18,000 wounded, ill and injured soldiers and veterans in our warrior transition units (WTUs) and the Army Wounded Warrior Program. We have 29 WTUs at major Army installations worldwide and nine community-based WTUs regionally throughout the United States and Puerto Rico. The Army also initiated a $1.2-billion military construction program for 27 projects to build 20 new WTU barracks, administrative facilities, and soldier and family assistance centers for the WTUs.

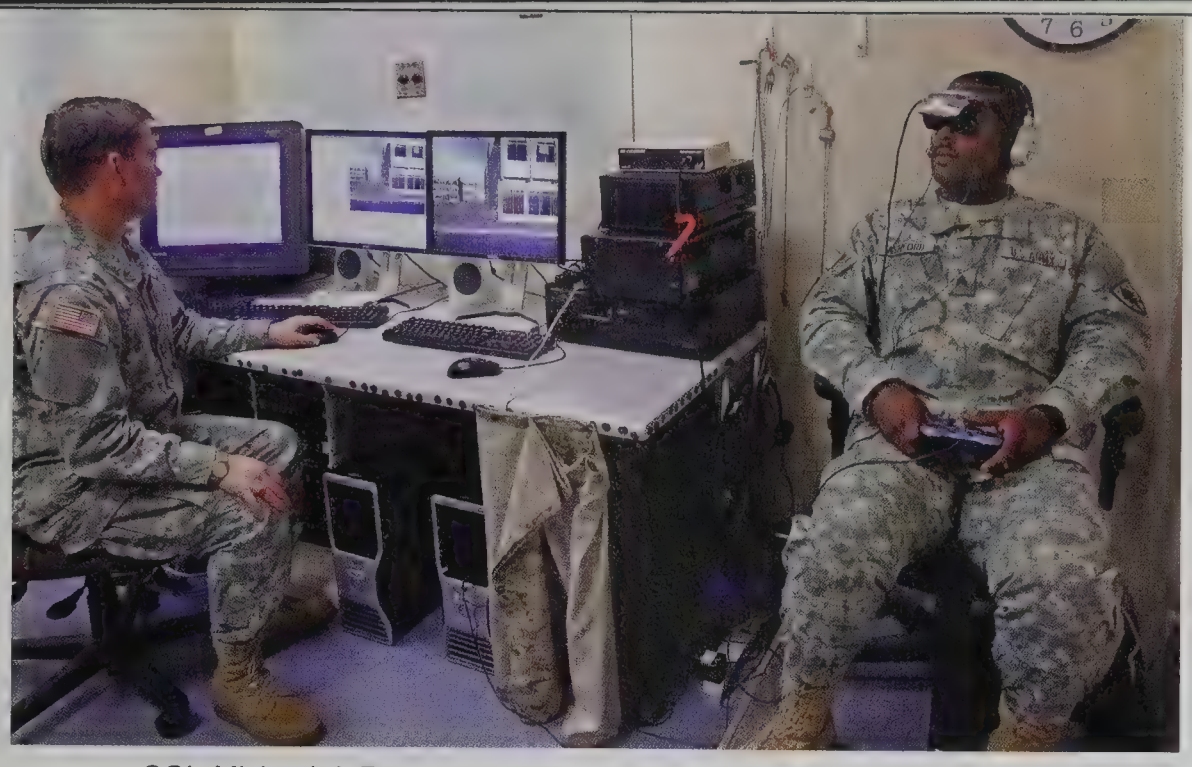
Prevention and Health Promotion

As an organization, we have honed our diagnostic capabilities and continue to pursue early treatment and inter-

Soldiers work their quadriceps with the TRX sprinter's start exercise during a clinic at Fort Bragg, N.C. The Army Family and Morale, Welfare and Recreation Programs is distributing 3,205 of the systems at Fort Bragg and in kits for troops overseas.

ention options. Through early pre-
ention, with emphasis on health pro-
notion, we strive to reduce the need
or subsequent care and have initiated
nultiple programs and initiatives un-
er the Army's Campaign Plan and
ur own Medical Innovations Cam-
aign Plan.

We have combined all major Army
ublic health functions—specifically
hose under the former U.S. Army Vet-
rinary Command and U.S. Army Cen-
er for Health Promotion and Preven-
ve Medicine—to form the new U. S.
rmy Public Health Command. The
onsolidation creates a single, proac-
ve, accountable agency for public
ealth and veterinary issues to focus on prevention, health
romotion and wellness for our soldiers and military re-
rees, family members and Department of the Army civil-
ns, whether deployed or at home. This functional and mis-
on alignment allows for a significant means of health
romotion and wellness information reaching the popula-
on we serve—especially our soldiers, many of whom have
gnificant acute and chronic pain management issues re-
lting from more than a decade of war.



COL Michael J. Roy conducts a demonstration of a lifelike simulator that represents a new form of post-traumatic stress disorder treatment with SGT Lenearo Ashford of Uniformed Services University.

Army Wellness Centers

Our Public Health Command oversees the Army Well-
ess Centers Operation Program, which provides guidance
nd manages the development and implementation
f Army wellness centers (AWCs) across and outside the
ontinental United States. The primary goal of the AWC
rogram is to enhance the self-efficacy of individuals to
aintain lifelong healthy behaviors. AWCs are integrated
ith the Patient-Centered Medical Home as part of the
omprehensive Care Plan. There is currently an initiative
nder way to develop 38 AWCs worldwide.

AWCs promote healthy lifestyles to improve the overall
ell-being of soldiers, family members, retirees and De-
artment of the Army civilians through integrated and
andardized programs and services. AWC programs can
so directly affect readiness by reducing lost or limited
uty time and the number of soldiers on physical profile.
he standard suite of services includes health assessment
view, physical fitness, healthy nutrition, stress manage-
ent, general wellness education and tobacco education.
t the installation level, any member of the wellness center
aff is able to provide unit-level health briefings on a vari-
y of health/preventive medicine topics to include self-
re, nutrition, fitness, blood pressure, cholesterol, body
nage, relaxation and more.

Army Medical Home

In the future, much of Army medicine will be practiced at
e Army Medical Home (AMH). AMH is a primary-care
odel being adopted throughout the military health-care system and in many civilian practices throughout the nation. The AMH model integrates patients into the health-care team and encourages them to be active participants in staying healthy.

It's health care as it should be—easy to access, patient- and family-centered, team-based, and quality-focused. We are transforming all of our primary care clinics—those on Army installations and in civilian communities—to provide soldiers and families with improved access and continuity of care.

We have enhanced our training and reorganized as an organization to support the full spectrum of operations to support our soldiers and families—especially those striving to recover and rebuild their lives after a severe burn, single or multiple amputations, a traumatic brain injury, or post-traumatic stress. For some, these wounds and injuries of war are often referred to as the "new normal." For our soldiers and family members, the new normal is not about lost limbs or long recovery times; it's about resiliency and the future for a productive, rewarding life without limits as we restore them to health.

The Future: Army Health

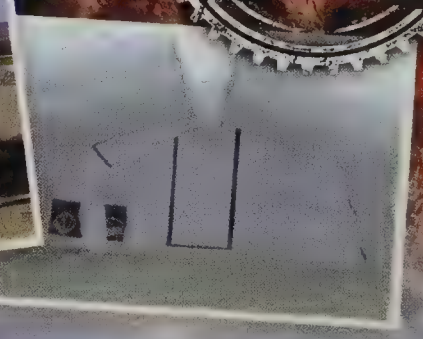
In the fall of 2011, a comprehensive health services support assessment team assessed our medical capabilities in theater and made recommendations to improve the efficiency of the health services delivered to servicemembers within the combined joint operations area. There are no comparative or historical assessments of health care and services that cover persistent conflict of this magnitude. This has given Army Medicine a profound understanding of current capabilities and has led to mapping its future.

As we face a time of economic uncertainty, we acknowledge that this is a time of challenges, but it is also one of great possibilities. While soldier care never ends, neither does the mission to provide health care.

The connection between health and Army readiness is clear. The more we positively influence health—our own and the Army's—the better we are to answer the call to duty. This is a call to action. Be ready! ★

CAMSS20TAC

QUICK ERECT SHELTER SYSTEM



SETS UP IN MINUTES

- MEETING THE DEMAND OF SPECIAL OPERATION FORCES FOR A QUICK ERECT DURABLI SHELTER
- TESTED AND PROVEN TO PROVIDE ENERGY SAVINGS BY REDUCING POWER CONSUMPTION BY 50%
- TESTED TO MIL STDS FOR USE IN EXTREME ENVIRONMENTS
- DURABILITY TESTED WITH 50 STRIKE/ERECT CYCLES
- COMPACT AND LIGHTWEIGHT ONE PIECE FRAME SYSTEM ALLOWS FOR EASY HANDLING
- DEPLOYED THROUGHOUT THE WORLD

Snow load tested to 10 PSF

Wind and driven rain tested at 55 MPH with gusts of 65 MPH

Testing at McKinley Climatic Chamber for extreme temperatures of -25 to 125f

CAMSS SHELTERS

TRIED AND TRUE™

800 984 7678 | WWW.CAMSS.CON

shelters@camss.com AVAILABLE ON GSA AND DL

Army Special Operations: Leading the Way In Human Domain Warfare

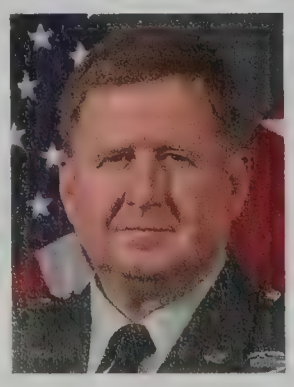
By LTG Charles T. Cleveland
Commanding General,
U.S. Army Special Operations Command

The U.S. Army remains the world's premier land warfare force because of its expertise and the broad range of its capabilities. Army special operations forces (ARSOF) are practiced masters of unconventional warfare (UW), counterinsurgency (COIN) and counterterrorism operations, and the Army's conventional forces (CF) are unmatched in their combat experience and capacity to conduct high-intensity combined-arms maneuver. Appropriately blended and properly employed, these Army forces provide the joint force commander, geographic combatant commander and the President of the United States with powerful and tested military options that can decisively address today's broad spectrum of threats in the strategically vital land domain and increasingly

Special Forces soldiers and their Afghan partners conduct joint operations in southern Afghanistan. Green Berets, the Army's special warfare maneuver forces, have provided their unconventional warfare expertise in developing Afghanistan's military and security forces.

emergent human domain, where war in the first decade of the 21st century has been concentrated.

UW became a mission for the U.S. Army in 1952 with the activation of the 10th Special Forces Group at Fort Bragg, N.C. Coupled with the Army's existing psychological warfare capabilities, the nation now had the strategic capacity to disrupt an adversary's confidence in its popular support and threaten its logistics lines and industrial base with a relatively small U.S. footprint. In the late 1950s this force, which had grown to include formations prepared to confront communist expansion around the globe, would be given the additional mission of helping protect friendly governments from lawlessness, subversion, insurgency, terrorism and even transnational criminal organizations when such support required a small-scale, low-visibility or clandestine approach.



***LTG Charles T. Cleveland** assumed command of U.S. Army Special Operations Command in July 2012. He has commanded from the Special Forces detachment level through the subunified command level, most recently as the commanding general of Special Operations Command Central at MacDill Air Force Base, Fla., and Special Operations Command South at Homestead Air Reserve Base, Fla. A graduate of the U.S. Military Academy at West Point, he has a master's degree in strategic studies from the U.S. Army War College.*

Today this form of special operations is referred to a special warfare and includes the missions of UW COIN, foreign internal defense, military information support operations and civil affairs operations. The Army's maneuver units for special warfare are the five active duty Special Forces (SF) groups and two National Guard Special Forces groups. Each SF group has an area of responsibility that corresponds to its supported geographic combatant command. This allows for the development of area expertise and language proficiency, which when coupled with indigenous groups, exceptional small-unit fighting skills, and their proficiency in operating in uncertain or denied areas for extended periods, make Special Forces well-suited for complex and uncertain environments.

After a decade of war in two theaters and longer commitments in the Philippines, Colombia, Yemen and elsewhere the U.S. Army has begun to develop a comprehensive program to study and promote interdependence between conventional and special operations forces (SOF). The goal is to make the application of Army capabilities seamless, from the early introduction of appropriately tailored ARSOF and CF that prepare the environment by way of alliance and capacity-building to the conclusion of combat operations should prevention fail. Underscoring this effort is the hard-won acknowledgement that the soldiers of the U.S. Army Special Operations Command (USASOC) are the military force of choice in the nation's efforts to shape the international security environment and prevent conflict. Still

The next big thing in Army Aviation.

S-97 RAIDER™ HELICOPTER

Sikorsky's solution for the Armed Aerial Scout will revolutionize Army Aviation with speed, range, and high/hot performance that pilots and planners have only dreamed of.

Our X2 Technology™ S-97 RAIDER will deliver capabilities that a conventional helicopter cannot match, including cruising at 200 knots in fully armed configuration, the ability to hover at 10,000 feet at 95°F, and unmatched maneuverability.

Our goal? Provide Army aviators with the most capable aircraft for the critical AAS mission.

orsky.com | 4813

Sikorsky
A United Technologies Company

A Special Forces NCO from 1st Special Forces Group (Airborne) conducts training with his Philippine army counterparts. Army Special Operations Forces assigned to Joint Special Operations Task Force-Philippines have partnered with the Philippine military in their efforts to defeat extremist groups operating in the archipelago as part of Operation Enduring Freedom-Philippines.

should prevention fail, USASOC provides unequalled support to combined-arms maneuver as well as COIN, UW and other population-centric conflicts that are often central to the joint force commander's campaign. It is in such conflicts that the human aspect emerges as a domain in its own right with its own requirements, vulnerabilities and opportunities. It is in this human domain that today's ARSOF formations are especially designed to fight.

To meet this requirement, USASOC maintains two different but mutually supporting special operations capabilities. The first comes from our country's commitment to support freedom-seeking people around the world, in some cases by providing material and personnel support to their efforts to free themselves from either oppressive regimes or occupying powers.

The second special operations requirement was born from our experiences in Desert One in 1980. From this failed rescue attempt U.S. leadership was determined to create a capability that would ensure success on future missions of vital national importance. This required the U.S. Army to maintain the ability to rapidly and surgically conduct sensitive, scalable and unilateral direct-action missions against adversaries anywhere in the world. This surgical-strike capability to conduct hostage-rescue or other unilateral-sensitive operations requires special airlift, intelligence and support assets that use the best available technologies to ensure success on the most sensitive direct-action missions. ARSOF surgical-strike maneuver units include the National Mission Force and the 75th Ranger Regiment.

USASOC has two formations, the Military Information Support Operations Command (MISOC) and the 95th Civil Affairs (CA) Brigade. Each provides a range of capabilities to ARSOF special warfare and surgical-strike maneuver elements as well as to CF units, the joint task force (JTF) and theater-level headquarters. These formations are core competencies in special warfare but the MISOC and the 95th CA Brigade may be equally critical in their support to SOF surgical strike CF counterinsurgency and even combined-arms maneuver operations. The MISOC is the Department of Defense's only active duty military information support capability. With two brigade-sized units that focus their battalions on assigned geographic combatant command areas of responsibility, a highly trained tactical military information support battalion and a global dissemination battalion the MISOC is an indispensable capability in execution of theater campaigns. The 95th CA Brigade also has

A Special Forces Operation Detachment Alpha prepares to conduct a military free fall parachute infiltration. High altitude low opening insertion is one of a multitude of special skills resident in Army special operations formations.

Rangers from U.S. Army Special Operations Command's 75th Ranger Regiment occupy a security position during operations in Afghanistan. Since the beginning of Operation Enduring Freedom, the 75th Ranger Regiment has conducted more than 10,000 action raids in numerous locations.

egionally focused battalions that provide language-quali-ed, area-oriented teams to SOF maneuver units and joint OF commanders. Both the MISOC and the 95th are nique and essential capabilities in population-centric or uman-domain campaigns.

USASOC's sustainment formation, the 528th Sustainment rigade (Special Operations) (Airborne), provides support large and small SOF operations and is uniquely config-red to use theater, Army, indigenous or SOF-unique sus-inment systems. These expert logisticians can operate in ny environment and are capable of supporting sensitive issions around the globe.

Recently activated, the U.S. Army Special Operations Avi-tion Command consists of the 160th Special Operations viation Regiment, the Systems Integration and Mainte-ance Office, and the Special Operations Aviation Training attalion. This highly tailored and specially equipped Army viation unit recruits the Army's best aviators, crews and aintainers in order to support the complex and high-risk equirements of SOF maneuver elements: the U.S. Army pecial Forces Regiment, the 75th Ranger Regiment and US-SOC's classified capabilities.

The foundation for the Army's special warfare capability is the U.S. Army John F. Kennedy Special Warfare Center and School (USAJFKSWCS), which trains and educates officers and enlisted soldiers in basic and advanced skills in the special warfare career fields of U.S. pecial Forces, psychological operations and civil affairs. Re-ently designated the U.S. Army Special Operations Center f Excellence, USAJFKSWCS also develops all Army special perations doctrine and selected collective mission prepara-on events. As such, the school is working with each of the rmy's Centers of Excellence to ensure that USASOC's por-on of the Army's range of military operations is adequately xplained and nested on behalf of the U.S. Special Opera-ons Command.

Ultimately, achieving the seamless application of Army capabilities to support the joint force commander will require that Army and joint doctrine reflect what the last decade has taught us. Doctrine must recognize the need to initiate the campaign well before large formations are required if the nation is to prevent or facilitate their use. Conflicts in the human domain particularly require interdependence in planned and programmed ways among SOF, CF, the U.S. interagency community, international nongovernmental organizations, alliances, and partner nations or freedom-seeking peoples fighting tyrannical regimes or occupiers. ARSOF will lead these campaigns. America's true asymmetric military capability, however, remains in its ability to conduct high-intensity, combined-arms maneuver and dominate land warfare. The U.S. Army is the most powerful deterrent to aggression against U.S. interests worldwide, and its dominance must remain unquestioned. Strategic landpower results from possessing unequalled capability and capacity in both human and land domains.

ARSOF will remain actively engaged in Afghanistan for the foreseeable future. Village stability operations, the Afghan national security forces commando and special forces programs, and the relentless, direct pressure on the Taliban from the Special Operations Joint Task Force elements will continue as the United States draws down its efforts in Afghanistan in the next couple of years. In addition to Afghanistan, on an average day ARSOF is conducting operations and training in about 55 countries with the purpose of maintaining alliances, building partner-nation capacity, supporting freedom-seeking groups or conducting unilateral special operations.

As long as belligerent nations continue to employ nonconventional means against the United States and terrorist networks continue their efforts to strike our country, the U.S Army, through its special operations and conventional forces, remains the indispensable and decisive centerpiece in the nation's defense. ★

I WILL ALWAYS PLACE THE MISSION FIRST.
I WILL NEVER ACCEPT DEFEAT.
I WILL NEVER QUIT.
I WILL NEVER LEAVE A FALLEN COMRADE

BRINGING MORE POWER TO THEIR MISSION

Army troops in the fight for freedom deserve the best support we can offer. The Army's Improved Turbine Engine Program (ITEP) will make sure they get it, specifying new combat performance, capability and efficiency standards for Black Hawk and Apache helicopters. ATEC's HPW3000 engine will provide increased power, enhanced dependability, rapid capability, increased payload and improved high/hot performance. With great... Burning less fuel. Saving billions of dollars.

ATEC

Honeywell

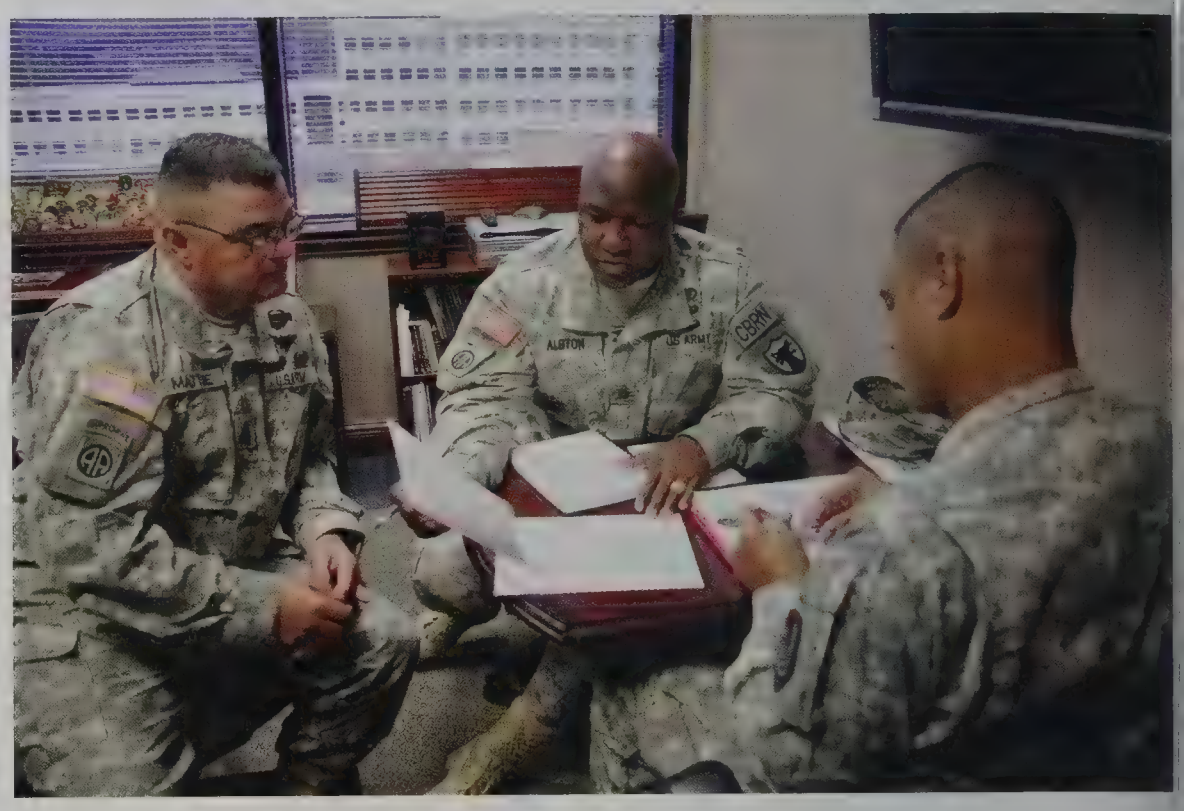
Pratt & Whitney
A United Technologies Company

Army Space and Missile Defense Today, Tomorrow and Beyond

By LTG Richard P. Formica
Commanding General, U.S. Army Space and Missile Defense Command/ U.S. Army Forces Strategic Command

The U.S. Army Space and Missile Defense Command/Army Forces Strategic Command (USASMDC/ARSTRAT) is focused on ensuring the Army's space and missile defense forces and capabilities are postured to support both current and future worldwide requirements. Army space and missile defense capabilities are key contributors to DoD's global strategy, "Sustaining U.S. Global Leadership: Priorities for 21st Century Defense." In support of the strategy, USASMDC/ARSTRAT provides critical space and missile defense capabilities to meet Army global missions for today, tomorrow and the day after tomorrow.

Our command is uniquely organized and geographically well-positioned to support the warfighter and meet its global space and missile defense mission. As the



U.S. Strategic Command CSM Patrick Alston (center) discusses future senior enlisted leaders meetings with U.S. Army Space and Missile Defense Command/ Army Forces Strategic Command (USASMDC/ARSTRAT) CSM Larry Turner (right) and SGM John Mattie (left), the command's G3 sergeant major, last December.

Army service component to U.S. Strategic Command (USSTRATCOM) we provide planning, integration, control and coordination of Army forces and capabilities in support of assigned USSTRATCOM missions. We are also the Army's force modernization proponent for space, high altitude and global missile defense, and the operational integrator for global missile defense. We have a close, collaborative relationship with the Missile Defense Agency (MDA) and are synchronized with USSTRATCOM's Joint Functional Component Command for Integrated Missile Defense (JFCC-IMD).

Everything we do centers around our three core tasks:

- Providing trained and ready space and missile defense forces and capabilities in service to the warfighter and the nation: Our *operations function*, what we provide today.
- Building future space and missile defense forces: Our *capability development* function, what we provide tomorrow.
- Researching, testing, and integrating space, missile defense, cyber, directed energy and related technologies: Our *material development* function, what we provide the day after tomorrow.

Our focus is to provide space and missile defense capabilities to the warfighter, to develop public servants and to inculcate the Army as a profession. Any success we achieve in supporting the warfighter is a direct result of the dedication of a great team of soldiers, civilians and contractors, as well as partners in industry and academia.

Accomplishments

Our first core task, nested in our operations function, is executed primarily through the 1st Space Brigade, the 100th Missile Defense Brigade, the Astronaut Detachment, the Army Space Personnel Development Office and our operations staff. On any given day, we have more than 875 operational forces controlling space operations and the ballistic missile defense system around the world—whether based in the continental United States, forward-stationed or deployed—contributing to homeland defense and delivering space and missile defense capabilities to the warfighters.

Over the past year, the USASMDC/ARSTRAT team supported 15 combatant commander, warfighter and mission rehearsal exercises; provided forces to Joint Functional Component Command for Space (JFCC-Space) and missile warning; and deployed space support and commercial imagery teams to theater, totaling more than 75 space teams that have deployed since the beginning of combat operations in Afghanistan and Iraq.

Last year, we provided geospatial intelligence and tailored satellite imagery products to U.S. Africa Command in support of Operation Odyssey Dawn and to U.S. Pacific Command in support of Operation Tomodachi; and many other operations and exercises throughout the year, principally to USSTRATCOM, U.S. Northern Command (NORTHCOM) and to other geographic combatant commands (GCC).

As a force provider for the U.S. missile defense capability of the phased adaptive approach, we work closely with JFCC-IMD and NORTHCOM to provide missile defense capabilities to defend the homeland and our forces and allies in the regions.

The command's operations team tracked half-a-million locations of friendly forces, partners and allies by providing friendly force tracking data from our mission management center and supported the Army's worldwide operations with satellite imagery products for combatant command operations and exercises throughout the year. We provided space tracking of the failed Russian satellite Phobus Grunt to USSTRATCOM and its JFCC-Space. Our satellite communications facilities were upgraded as we dedicated the second new Wideband Satellite Communication Operations Center at Fort Detrick, Md., a world-class

LTG Richard P. Formica *is the commanding general, U.S. Army Space and Missile Defense Command/U.S. Army Forces Strategic Command. His previous assignments include commanding general, Combined Security Transition Command-Afghanistan and special assistant to the Army Chief of Staff working missile defense-related issues. LTG Formica has master's degrees in military art and science from the Army Command and General Staff College and in national security strategy from the National War College.*

acility that enables around-the-clock management of the ate-of-the art Wideband Global satellite communications SATCOM) constellation.

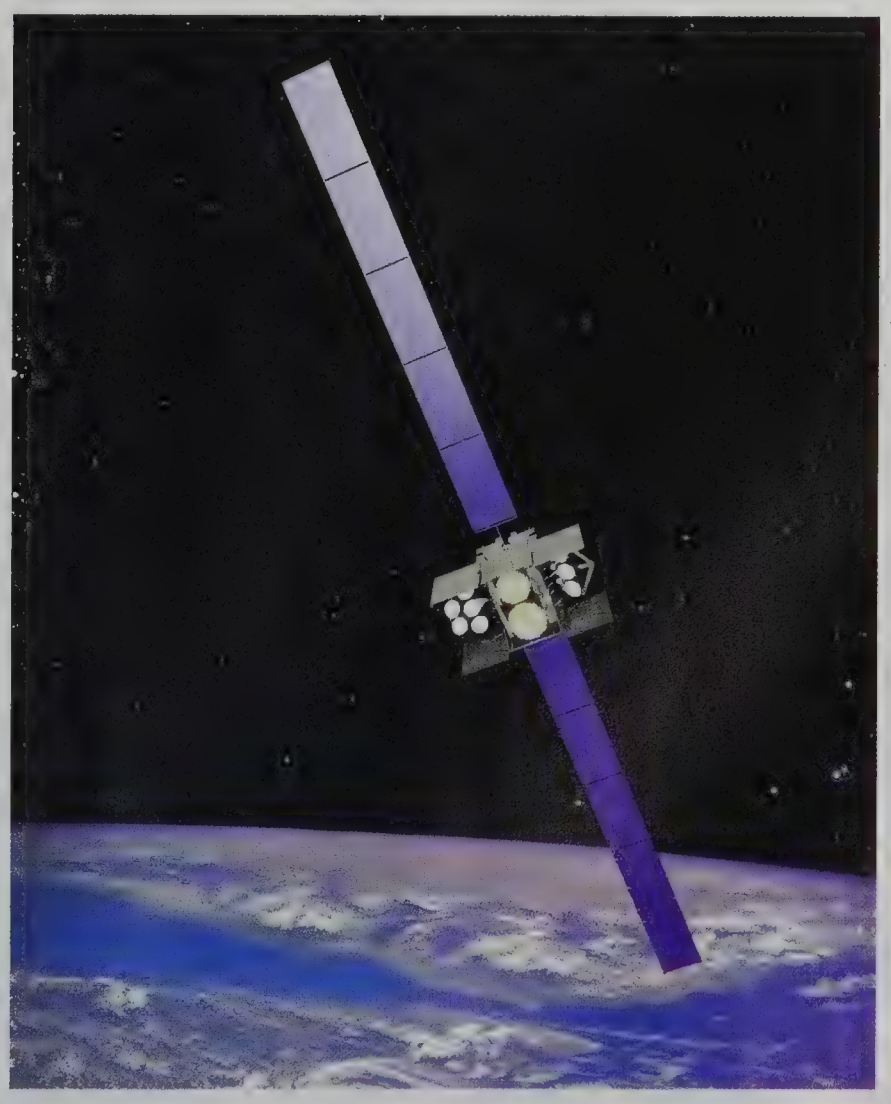
Our second core task, to build future space and missile efense forces, resides in the capability development func- on (capabilities we provide tomorrow). The capability de- elopment function is executed by our Future Warfare enter (FWC), through its Battle Lab, Directorate of Capa- ility Development, Directorate of Training and Doctrine, ecision Support Directorate and the Training and Doc- ine Command (TRADOC) capability manager for space nd global missile defense. The FWC is responsible for lentifying requirements and building tomorrow's space nd missile defense forces.

Through the doctrine, organization, training, leader de- elopment, materiel, personnel and facilities (DOTLMPF) rocess, FWC informs and influences the Army 2020 Task orce, the Army capstone concept, the Army operating con- ept, the warfighting function and the Profession of Arms ampaign. The command recently completed the Army pace operations white paper, certified by TRADOC, which ys the foundation for determining space capabilities for ne Army of 2020. We expanded our efforts in ballistic mis- le defense training, and we embarked on a task to inte- rate space knowledge into all Army leader and soldier de- elopment courses. USASMDC/ARSTRAT supported the rmy's Network Integration Evaluation (NIE) series by pro- iding the FWC Battle Lab's aerostat in support of the aerial er. The aerostat functioned as an elevated platform for rmy communications payloads being assessed as part of etwork modernization. FWC fielded Eagle Vision & OVER Responsive Exploitation of Space Products for Tac- cal Use capability to operational units, which provides ommercial imagery support for real-world operations. WC collaborated with the Air Force Space Command to ex- loit space capabilities using handheld devices. USA- MDC/ARSTRAT deployed prototype capabilities, iSpace nd advanced visual information system, to demonstrate ow handheld devices can provide space situational aware- ess for the space teams in theater. The FWC continued de- elopment of space superiority development efforts, both terim and long term, which resulted in new operational pabilities for deployed forces.

Our third core task is conducted as part of our materiel evelopment function (capabilities we provide the day af- r tomorrow) by our technical center. Its four subordinate ements—Space and Cyberspace Technology Directorate, merging Technology Directorate, Rapid Transition, and he U.S. Army Kwajalein Atoll/Reagan Test Site (US- KA/RTS)—achieved several significant accomplishments is year that impact future military operations in space nd in missile defense.

The SMDC Nanosatellite Program (SNaP) received joint pabilities technology demonstration (JCTD) approval nd is scheduled to launch in mid-2013 for an extended monstration period of providing niche communication pabilities to the tactical warfighter. We believe that SNaP will provide global presence and assured access communications where none exists for the warfighter at the lower echelons. The high energy laser technology demonstrator completed fabrication, integration and low-power testing in 2011 and is preparing for the initial high-power demonstration with a 10-kilowatt laser sometime in 2012. The Advanced Hypersonic Weapon successfully conducted its first flight as part of the DoD's Conventional Prompt Global Strike program, as a result of the great teamwork of USASMDC/ARSTRAT, U.S. Army Aviation and Missile Research, Development and Engineering Center, Sandia National Laboratories, and under the leadership of the Under Secretary of Defense for Acquisition, Technology and Logistics. We are also leading an Army-wide effort to evaluate electric fires potential.

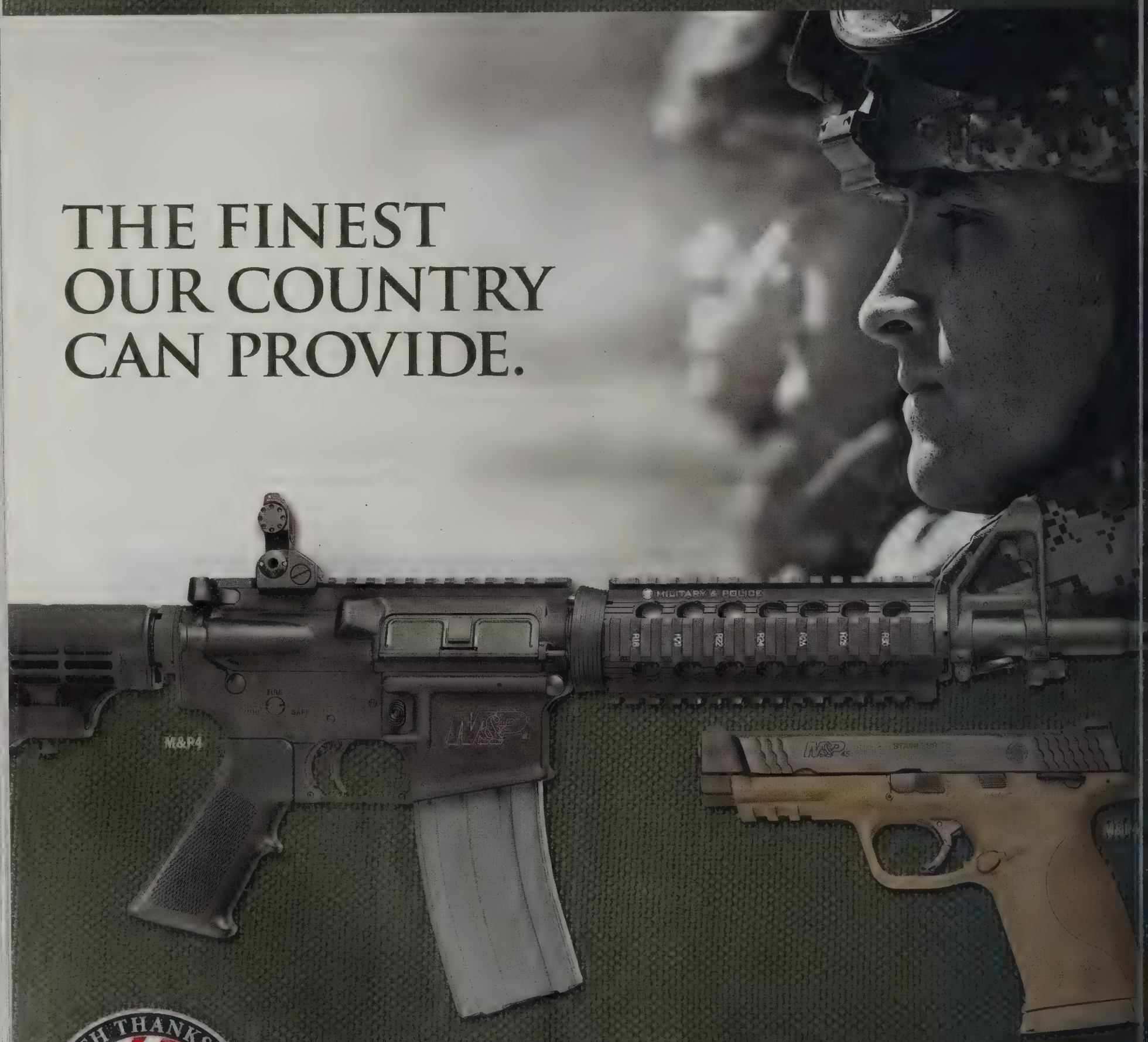
The tech center is developing technologies in support of current operations with the Long Endurance Multi-Intelligence Vehicle (LEMV) program, a first-of-its-kind hybrid airship that will provide long duration intelligence, surveillance and reconnaissance capabilities. LEMV is progressing toward a first flight in the summer of 2012, followed by a deployment to support warfighters. In addition, the tech center established a distributed operations capability at the new Reagan Test Site (RTS) Operations Center-Huntsville (Ala.), which provides a better and more efficient way to test operations without traveling to the Pacific region. We



Wideband Global Satellite (WGS)-4 successfully completed payload characterization and verification conducted by the WGS SATCOM System Expert Office, USASMDC/ARSTRAT, Australian Ministry of Defence personnel, and support contractors.

Smith & Wesson

THE FINEST OUR COUNTRY CAN PROVIDE.



WITH THANKS TO OUR
NATION'S FINEST
MAIL-IN REBATE PROGRAM - VALID 7/1 - 12/31, 2012
See details at smith-wesson.com

M&P™
by Smith & Wesson
NASDAQ:SWH
smith-wesson.com/m

...erican Company

lso obtained Army approval to transfer the garrison support operations for the USAKA/RTS to Installation Management Command (IMCOM) while USASMDC/ARSTRAT retains the senior mission commander responsibilities.

Goals

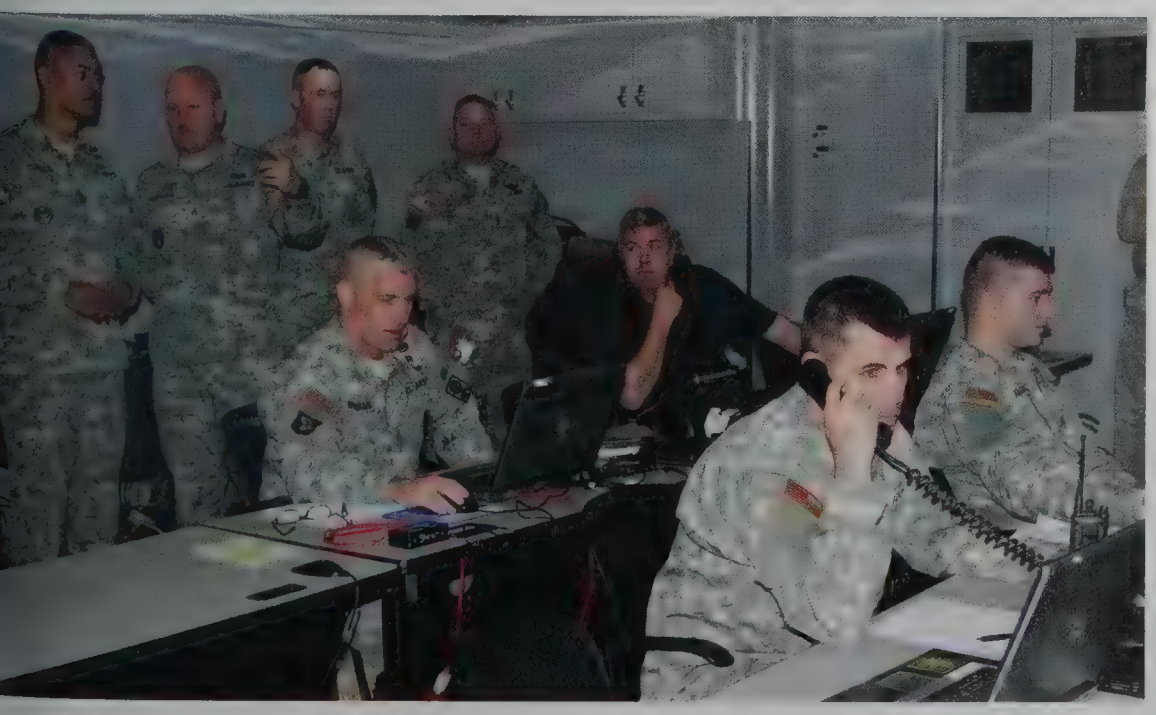
So what's ahead? In 2013, in our operations core task (today), we will continue to focus on providing trained and ready space and missile defense forces, including eight deployments and 11 exercises; activate the Army Navy/Transportable Radar Surveillance-2 forward-based mode Radar Detachment in support of U.S. Central Command; continue to provide joint tactical ground station in-theater missile warning and friendly force tracking to the geographic combatant commanders; modernize our Landstuhl, Germany-based wideband SATCOM operations center; gain operational acceptance of Wideband Global SATCOM-4 and Mobile User Objective System-1; and provide Consolidated SATCOM System Expert capability for DoD's narrowband and wideband SATCOM systems.

In our capability development core task (tomorrow), our priorities will be to inform and influence future force structure through total army analysis and the Army 2020 study; standardize DOTLMPF support of the AN/TPY-2 FBM radars to the GCCs; complete transition of the Ground-based Midcourse Defense Operator's Course from MDA to the Army to train more than 2,800 space and missile defense soldiers, civilians and joint servicemembers; support TRADOC with the Space Capabilities Assessment and Mission Command Capabilities Based Assessment; and support Program Executive Office Missiles and Space with a study on integrated air and missile defense that identifies appropriate architecture, firing doctrine and inventory balance.

In our materiel development core task (the day after tomorrow), our goals are to deploy the LEMV; develop three responsive space JCTDs; work with IMCOM and headquarters Department of the Army to transfer USAKA/RTS garrison responsibilities beginning in fiscal year 2013; work with the Office of the Secretary of Defense to plan for the next AHW flight test; perform unmanned airborne surveillance defeat mission demonstrations using mobile demonstrator with onboard 10-kilowatt power laser (High Energy Laser Mobile Demonstrator field testing); support the Ballistic Missile Defense System operational mission test at RTS; and conduct extensive lethality testing against rockets, artillery, mortars and unmanned aerial systems (solid state laser test bed).

USASMDC/ARSTRAT conducts the first test flight of the Advanced Hypersonic Weapon, a first-of-its-kind glide vehicle designed to fly within the Earth's atmosphere at hypersonic speed and long range, in November 2011 from Kauai, Hawaii, to the Marshall Islands.

In summary, USASMDC/ARSTRAT is a diverse, complex and global command that provides critical space and missile defense capabilities to the Army, STRATCOM, the geographic combatant commanders and the warfighter. I am very proud of the soldiers, civilians, and contractors on our team and our many stakeholders. We are focused on accomplishing our mission in concert with our partners in industry, academia, and the other federal agencies. As the Army reduces its operations in Afghanistan and pivots not only toward Asia but to the rest of its global commitments, USAMDC/ARSTRAT stands ready to provide capabilities for today, tomorrow and the day after tomorrow. ★

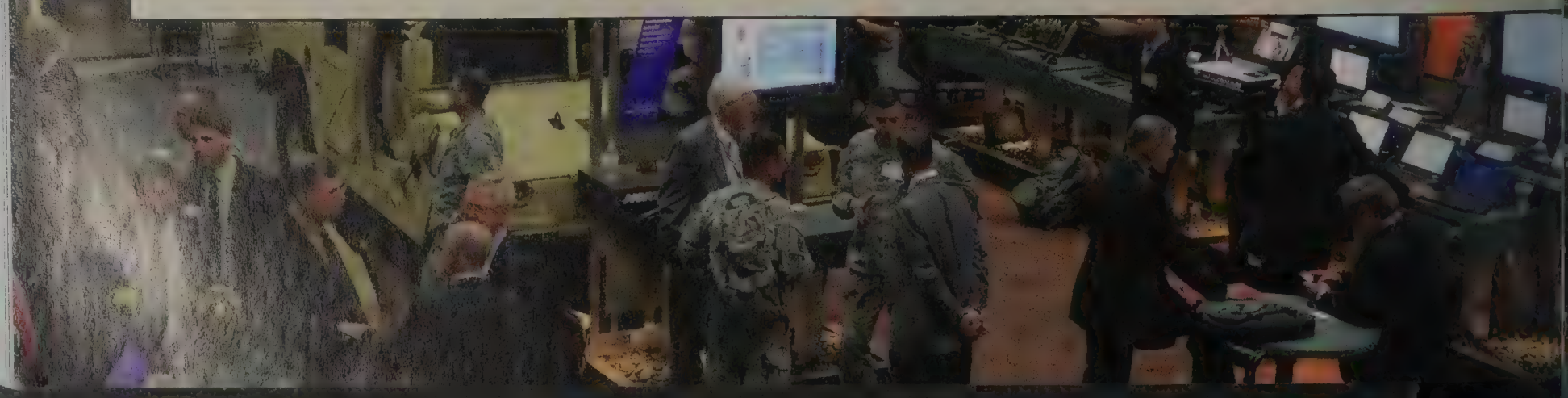


Soldiers of the 263rd Army Air and Missile Defense Command based out of Anderson, S.C., visited the USA-SMDC/ARSTRAT Command at Redstone Arsenal, Ala., in March to train at the Joint Air Defense Operations Center.

AUSA *Meetings & Events in 2013*

Date	*Event*	*Location*
January 9–11	**AUSA's ILW Aviation Symposium and Exposition**	National Harbor, Maryland Gaylord National Hotel and Convention Center
February 17–21	**AUSA's USA Pavilion IDEX 2013***	Abu Dhabi, United Arab Emirates ADNEC
February 20–22	**AUSA's ILW Winter Symposium and Exposition**	Fort Lauderdale, Florida Greater Fort Lauderdale/Broward Co. Convention Center
April 9–11	**AUSA ILW LANPAC Symposium and Exposition**	Honolulu, Hawaii Sheraton Waikiki
May 7–10	**AUSA's USA Pavilion IDEF 2013***	Istanbul, Turkey TUYAP
September 10–13	**AUSA's USA Pavilion DSEI 2013***	London, United Kingdom ExCeL
October 21–23	**AUSA Annual Meeting and Exposition**	Washington, D.C. Walter E. Washington Convention Center

**For more information on IDEX, IDEF or DSEI please contact Amy Frankenstein. Phone: (703) 907-2413.*



U.S. Army Corps of Engineers

Worldwide Engineering: Support for the Nation

By LTG Thomas P. Bostick
U.S. Army Chief of Engineers
and
Commanding General,
U.S. Army Corps of Engineers

On May 22, I took command of the finest military engineer organization in the world: the U.S. Army Corps of Engineers (USACE). Our workforce of 37,000 civilians and 600 soldiers supports military programs and civil works.

USACE is organized into nine divisions and 44 districts. Our organization also includes numerous subordinate units, including 43 centers of expertise and seven research-and-development laboratories. Eleven active Army units are assigned to USACE—the 249th Engineer Battalion (Prime Power) and 10 forward engineer support teams (FEST). The 249th is the only prime power generation unit in the Army. It provides commercial-grade electric power to military units and federal relief organizations during any kind of operation, from training to disasters

LTG Thomas Bostick, U.S. Army Chief of Engineers and U.S. Army Corps of Engineers (USACE) commanding general, confers with Far East District area engineer Greg Reiff concerning construction progress at U.S. Army Garrison Humphreys, South Korea.

to war. FESTs are expeditionary engineering assets that deploy to conduct engineering and construction management in combat or contingency environments. The teams have both military and civilian members from a wide range of disciplines including electrical, mechanical, civil and environmental engineering, logistics, and resource management. USACE also works closely with two U.S. Army Reserve theater engineer commands, the 412th and 416th.

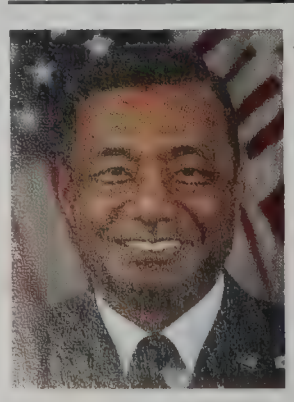
Engineer Regiment

USACE does not work alone; we are part of a larger organization, the 110,000-strong Engineer Regiment. Of those, 75,000 are combat engineers who provide four lines of support: mobility, protection, expeditionary logistics and force protection, and infrastructure and partner capacity.

Our engineers in uniform ensure joint force mobility on the battlefield, finding improvised explosive devices (IED); clearing minefields; building roads, bridges, airfields and base camps; and visualizing the battlefield through geospatial engineering.

The Engineer Regiment and USACE offer incredible capabilities to the armed forces and the nation:

- Strong partnerships with engineers of other U.S. military services and allied forces.
- Well-established relationships with international governments; federal, state and local agencies; nongovernment organizations; tribal nations; academia; and industry.
- First-rate research and development capabilities and advanced geospatial technologies.
- Modernized mobility, counter-IED and counter-mine capabilities.
- Extensive knowledge in sustainability and energy security.



LTG Thomas P. Bostick *is the U.S. Army Chief of Engineers and commanding general of the U.S. Army Corps of Engineers. Previously, he served as the deputy chief of staff, G-1, and as special assistant to the Chief of Staff of the Army. He has also served as commanding general, U.S. Army Recruiting Command, Fort Knox, Ky., and director of military programs, U.S. Army Corps of Engineers, with duty as commander, Gulf Region Division, Operation Iraqi Freedom, Iraq. A graduate of the U.S. Military Academy, LTG Bostick has master's degrees in [illegible] and mechanical engineering from Stanford University.*

One of our major force-structure initiatives is the brigad engineer battalion, which will better integrate engineer into the brigade combat team. We are also reorganizing ou echelon-above-brigade engineer units after our experi ences with modularity and 10 years of combat. We ar working with our partners in industry to modernize ou equipment. The results of our new equipment and im proved tactics can be seen in the improved IED detectio rates in Afghanistan.

Military Missions

USACE's military missions support the Army's thre major roles: prevent, shape and win. We *prevent* by deliver ing facilities and infrastructure worldwide to help soldier maintain readiness and the Army achieve modernizatio goals. We *shape* through our support to combatant com manders, which includes military-to-military assistanc and humanitarian response for partner nations, and globa interagency development assistance. Finally, we suppor the Army's expeditionary mission with research, develop ment and engineering to provide soldiers the tools to *win*.

Military missions focus on four vital areas: busines processes, methods of delivery, energy security and sus tainability, and combatant command (COCOM) support.

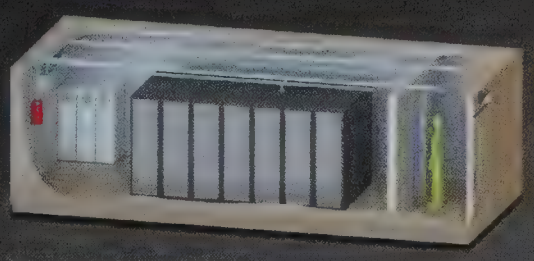
Business Processes. In the past decade, USACE exper enced an unprecedented surge in military constructio from two overseas contingency operations, Base Realign ment and Closure (BRAC) 2005, the Grow the Army initia tive, modularity, and the American Recovery and Rein vestment Act (ARRA) of 2009. During this time, busines processes were transformed to meet mission requirement In the past five years, we delivered $7 billion in militar and civil ARRA work, and $12 billion in BRAC-relate construction, including everything from hospitals to mas sive training facilities—the biggest military constructio operation since World War II.

BRAC required USACE to deliver 274 large, comple and operationally critical facilities. To name just a few, US

Built for any situation, inside & out.

Secure, Deployable Facilities

Magazines & Armories
AR 190-11, DoD 5100.76M



Shielded Facilities
MIL-STD-188-125

Secure Communications
ICD 705, JAFAN 6/9

Fully customizable facilities to meet your mission objectives, ranging from 8 to 10,000 square feet. Armag's proprietary Type II design meets or exceeds military specs for forced entry and includes integrated ballistics protection. All of our products are cost-effective and delivered quickly, so they'll be mission ready when you are.

ARMAG®
UNCOMPROMISED PHYSICAL SECURITY

ArmagSecure.com 877-770-1033

ACE delivered three four-star command headquarters: the U.S. Army Training and Doctrine Command headquarters at Joint Base Langley-Eustis, Va.; U.S. Army Forces Command headquarters at Fort Bragg, N.C.; and the U.S. Army Materiel Command/Security Assistance Command headquarters at Redstone Arsenal, Ala.

The surge is complete, and we are codifying the transformed business processes by incorporating best practices and lessons learned in everything we do from initial planning to project closeout.

Methods of Delivery. In this era of reduced funding for military construction, we are improving the tools and techniques to deliver energy-efficient infrastructure, with increased emphasis on restoring and modernizing existing facilities. The tools and techniques focus on enterprise approaches that lower acquisition costs and reduce delivery time frames. We're also developing integrated enterprise strategies that reduce acquisition time and costs while producing competitive results.

Energy Security and Sustainability. While energy security and sustainability have long been considerations in our projects, they are now essential drivers. Since 2008, USACE has built 31 Army facilities meeting the LEED (Leadership in Energy and Environment Design) gold standard and 22 that met the silver standard. The Engineering Support Center, Huntsville, Ala., leads the USACE effort to design "green" buildings for the armed forces.

Some important facilities that met the LEED gold standard are the Maneuver Center of Excellence headquarters at Fort Benning, Ga., and dormitories at Moody Air Force Base, Ga. Buildings recently rated as silver are the Reception Station Barracks at Fort Benning, Ga.; the headquarters of U.S. Army Europe; the General John Shalikashvili Mission Command Center in Wiesbaden, Germany; and the Army Ground Systems Power and Energy Laboratory at the U.S. Army Detroit Arsenal in Warren, Mich.

Platinum certifications, the highest level, went to the brigade and battalion headquarters building of the 4th Brigade Combat Team, 4th Infantry Division, at Fort Carson, Colo., and the Community Emergency Services Station at Fort Bragg.

COCOM Support. USACE is a global organization. At any time, USACE is on the ground in more than 100 countries supporting the Department of State, allied armed forces, NATO, the U.S. Agency for International Development, the ambassadors and embassies, and many others, especially the COCOM.

I recently returned from the Pacific Command area of responsibility, where we are delivering high-impact, low-cost projects that provide technical assistance for contingency response, international capacity development and project execution in Indonesia, Japan, Australia, New Zealand, Palau, Thailand, Mongolia and Bangladesh. We're similarly engaged with other COCOMs around the globe.

Overseas Contingency Operations

Overseas contingency operations constantly evolve as the U.S. missions change in Afghanistan and Iraq. USACE's Transatlantic Division provides oversight, allowing the Middle East District (MED) and two Afghanistan districts to focus on project execution.

The MED Iraq Area Office in Baghdad continues the work of the past eight years. Most of today's construction missions are foreign military sales projects funded by the Iraqi government. MED's Iraq Area Office has about 60 projects either in progress or planned, valued at $700 million.

USACE has two districts in Afghanistan (Afghanistan Engineer District-North, in Kabul, and Afghanistan Engineer District-South, in Kandahar) with about 900 deployed civilians. We have completed more than $5 billion of construction in Afghanistan, and about $10 billion worth remains to be completed. Our 2012 construction mission of more than $3.7 billion is focused on four areas: Afghan National Security Forces, the U.S./Coalition Forces Power Projection Program, the Counter-Narcotics/Border Management Initiative and the Strategic Reconstruction Program.

SSG Andrew Miltenberger operates a remote-controlled submersible at Dahla Dam, in Afghanistan's Kandahar Province. SSG Miltenberger is a member of 569th Engineer Dive Detachment, which conducted hydrographical surveys and inspections of underwater structures at the Dahla and Kajaki Dams.

Engineer Research and Development Center

USACE's research and development serves DoD in every way from winning wars to protecting individual soldiers. The Engineer Research and Development Center (ERDC) has several laboratories and about 2,500 research engineers, scientists and support staff. Last year, ERDC managed a $1.6 billion research program. About 84 per-

Construction of Fort Belvoir (Va.) Community Hospital, which replaced the installation's Dewitt Army Hospital and expands the military medical community's capabilities within the National Capital Region, was overseen by the USACE Norfolk District and built in five years through an integrated design/bid/build procurement process.

ent of that work was for the armed services, 13 percent for ivil works, and three percent for military installations.

Recent innovations to support the Army include the following.

IED Defeat. USACE technologies are deployed in Afghanstan to detect IEDs before they harm soldiers. USACE has developed technologies for priority target areas to prevent placement of IEDs and to reduce their blast effect.

Modular Protective System. The Modular Protective System (MPS) is composed of a lightweight frame and high-strength panels that are easily emplaced by soldiers without heavy equipment. MPS provides protection from a variety of threats, including rocket-propelled grenades, mortars and vehicle bombs. Self-contained kits for command posts, mortar pits, guard towers and other structures can be easily airlifted by helicopter.

Reachback. The USACE Reachback Operations Center (UROC) averages about 4,000 requests for assistance annually. ERDC developed portable secure telecommunications kits, more than 300 of which are deployed worldwide. Soldiers use them to reach USACE experts or others in government, industry or academia via UROC for assistance with field engineering problems.

Army Geospatial Center

USACE has always been the Army's topographer. Our Army Geospatial Center (AGC) provides geospatial information and expertise for Army implementation in land operations. Geospatial information includes the Earth's surface, subsurface, bodies of water, atmosphere and adjacent orbital space.

The AGC's expertise helps build the geospatial foundation required to generate the high-fidelity common operating picture for planning missions stateside and abroad. As the Army's knowledge center for geospatial expertise, the AGC supports its LandWarNet/Mission Command on-the-move concepts, capabilities and systems, facilitating dissemination of relevant geospatial information to every echelon throughout the battlefield.

Civil Works

USACE has a significant civil works operation, and we are undergoing one of the largest civil works transformations in U.S. history. This $6.7 billion annual mission develops, protects and restores the nation's water infrastructure and related resources. It constitutes much of our day-to-day work, and it makes enormous contributions to this nation's economy, well-being and safety.

USACE maintains 12,000 miles of waterways with 239 lock chambers and handles more than 2 billion tons of commerce annually, including 70 percent of imported oil. We host about 370 million visits a year to our lakes and beaches. In addition, USACE owns 24 percent of the nation's hydropower.

Disaster response is one of our most important civil works missions. In 2011 USACE responded to nearly three times the disaster declarations of an average year. There was record high water along the Red, Ohio, Mississippi, Missouri and Souris Rivers. The Mississippi River and Tributaries Project prevented the flooding of nearly 10 million acres and damages of about $110 billion, while our flood control systems in the Missouri River Basin prevented $7.6 billion in damages. About 2,400 USACE personnel deployed to work these disasters. We received $1.7 billion from Congress to restore the flood systems for the 2012 storm season.

The Future

Today is like no other time in our history. USACE's top priority remains to enable the Army and nation to win the current fight, while meeting the needs of our nation in civil works and emergency response missions.

The Army and nation are operating in a more complex, less certain and fiscally restrained environment. Now more than ever, the nation needs a lean, agile, strong, competent and trusted Corps of Engineers, one that serves the nation and the Army and that truly teams with our many military and civilian partners and stakeholders to solve engineering and scientific challenges facing the joint force and the global community.

I am committed to working with all of our partners to continue the traditions of the Engineer Regiment to meet the needs of this great country and always deliver. ★

Together, we can turn "repair" into upgrade.
And "cost" into cost-effective.

How do we meet today's military directive to do more for less? By offering innovative service programs that increase reliability and decrease life-cycle costs.

Our reliability-centered maintenance programs provide cost-effective improvements and retrofits, upgrading products to higher standards and delivering peak performance. It's a focus that's enhanced by partnerships with repair depots to help optimize reliability and availability.

The bottom line? Only Parker can design Parker products to keep military aircraft flying longer and stronger for less. Call us at **(949) 809-8100** or visit **www.parker.com** to learn more.

aerospace
climate control
electromechanical
filtration
fluid & gas handlin
hydraulics
pneumatics
process control
sealing & shielding

See us at **AUSA, Booth 3231.**

Parker Aerospace

ENGINEERING YOUR SUCCESS
www.parker.com

©2012 Parker Hannifin Corporation UH6-1-2

People Are the Army's Greatest Strength

By LTG Howard B. Bromberg
Deputy Chief of Staff, G-1

The responsibility of the Army G-1 is to ensure that our Army is properly staffed to meet the current and future challenges as required by the National Military Strategy. It is our job to ensure that the Army implements and carries out personnel policies and programs designed to ensure a ready and resilient all-volunteer force of soldiers, civilians and their families.

Currently, the Army G-1 is focused on several important issues that will shape our force well into the future.

Operationalizing

A complex current and future threat environment, coupled with a time of fiscal constraints, requires us to reshape our Army to meet these demands. Over a five-year period from 2013–2017, we will decrease our end

SPC Alicia Flores (right) with 1st Medical Brigade based out of Fort Hood, Texas, reenlists in the Hindu Kush Mountain Range—altitude, 12,500 feet—in Afghanistan.

strength in the active component from 570,000 to 490,000. Much of this reduction will occur through normal transition of soldiers; achieving the fiscal year (FY) 2017 force structure, however, will require approximately 26,000 additional enlisted losses and 5,000 officer losses beyond normal attrition. Thus we are monitoring and adjusting accession levels, promotion selectivity and tightened retention standards to help shape our force naturally. Our focus will be on retaining the best soldiers in the right grades and skills; unfortunately, we expect to lose good, combat-seasoned leaders.

Obviously the Army can't simply stop hiring, as many private companies do to reduce their workforce. Even though the overall size of the Army will decrease, we will continue to recruit and retain the best young men and women to be the Army leaders of the future.

Transition

The Army is committed to ensuring that soldiers have the support they need and deserve *before* separating from the Army and entering the civilian workforce.

Our soldiers and their families will face many new challenges as they make the transition from military to civilian life, not the least of which is finding a post-military career. In collaboration with the other services, Office of the Secretary of Defense and numerous federal agencies, the Army is transforming the transition process. In August 2011, the Secretary of the Army issued a new transition policy. First and foremost, the transition process is now a commander's program. Support for soldiers who are leaving active duty is a priority, and commanders are held accountable to ensure that soldiers are career-ready when they leave the service or complete an active duty tour while in the reserve component. Soldiers have responsibility as well and must begin the actions necessary to become career-ready no later than 12 months before their separation date.

The Army is supporting the implementation of the Veterans Opportunity to Work to Hire Heroes Act, which the President signed last November. This law makes participation in transition services mandatory (with few exceptions) for all servicemembers. It also empowers the Department of Defense, in collaboration with the Veterans Administration, Department of Labor and other federal agencies, to enhance transition services and ensure that servicemembers receive relevant and quality instruction to enable their career readiness. The comprehensive effort includes training in such areas as résumé building and translating of military skills into civilian terminology, financial and budget planning, entrepreneurial skills, pursuing opportunities in higher education and understanding of veterans' benefits.

The re-engineering of the Army's transition process ensures leadership involvement that injects discipline into the process and moves the experience from an attendance event to an outcomes-based program. By receiving high quality training and a variety of services that meet individual needs within an ample time frame, soldiers will experience less stress and the greatest opportunity for success after their military service.

Women in the Army

The Army is currently considering historic policy changes that could potentially open hundreds of positions to women.

The 2011 National Defense Authorization Act required the Secretary of Defense to conduct a review of laws, policies and regulations that affect female servicemembers' opportunities to compete and excel in the armed forces. The report, delivered to Congress in February, states that the Army is prepared to eliminate its colocation restriction and identified six enlisted occupational specialties and 80 units currently closed to women that it intends to open. These policy changes will

LTG Howard B. Bromberg *is the deputy chief of staff, G-1. Previously, he served as the deputy commanding general/Chief of Staff, U.S. Army Forces Command, and as senior commander, Fort Bliss, Texas. He also served as commanding general, 32nd Army Air Missile Defense Command, while serving in Operation Enduring Freedom, Operation Iraqi Freedom, Saudi Arabia, Kuwait and Iraq. A graduate of University of California at Davis, LTG Bromberg has a bachelor's degree in agricultural economics and management.*

PRECISION
FOCUS
EXCELLENCE

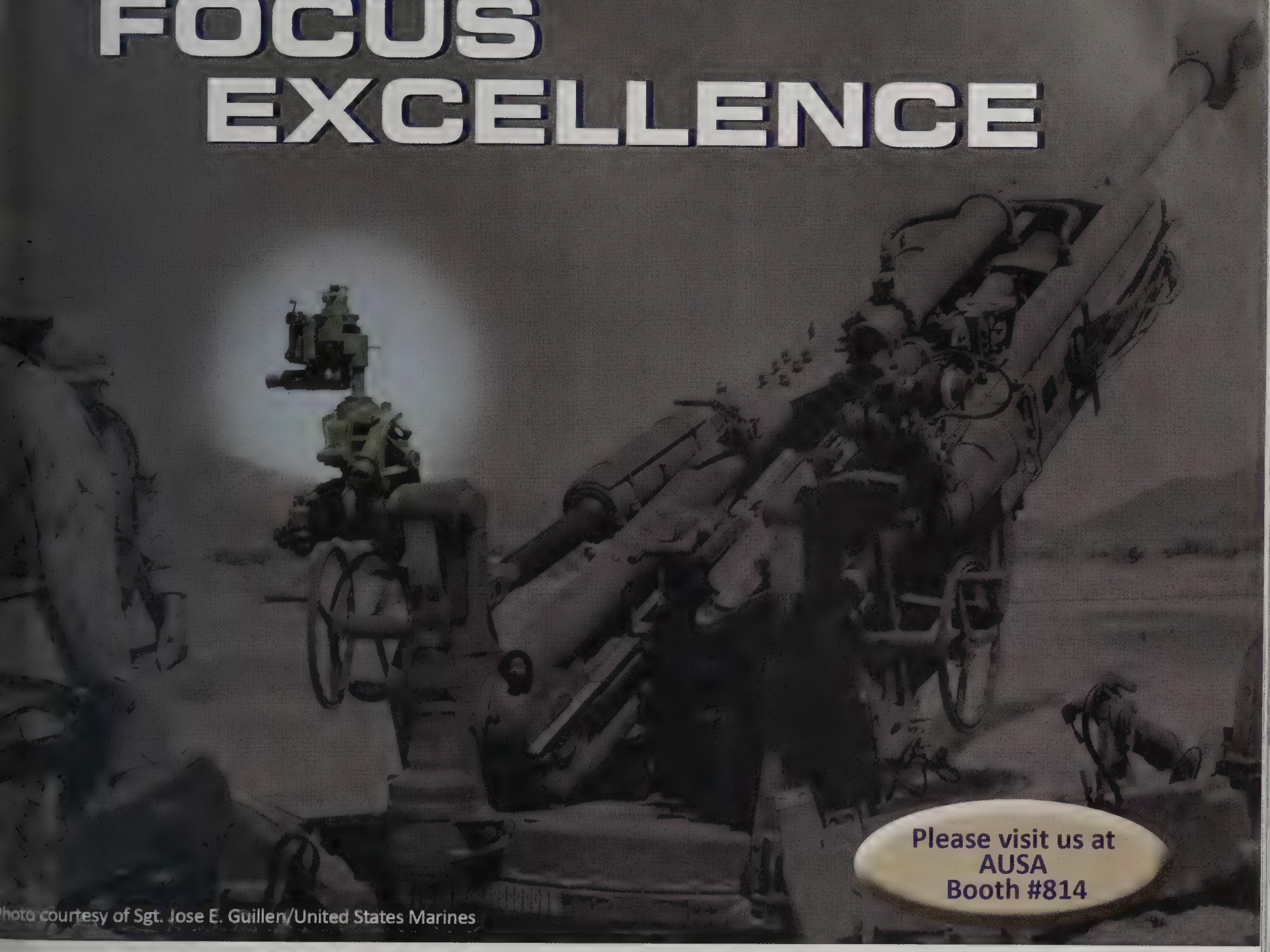


Photo courtesy of Sgt. Jose E. Guillen/United States Marines

Seiler Instrument is a contract manufacturer of precision optical instruments and components. We are the original equipment manufacturer of the optical fire-control used on all U.S. Howitzer and Mortar systems.

From start to finish, Seiler Instrument is responsible for the machining, assembly and testing of all components of the optical fire-control system.

In addition, Seiler Instrument specializes in the inspection, repair, overhaul and refurbishment of artillery fire-control on all existing U.S. Howitzer systems as well as many Howitzer systems used by our Allies. Refurbished fire-control can extend the life of your weapon at a fraction of the cost of replacement.

SEILER
INSTRUMENT
AND MANUFACTURING CO., INC.
800-489-2282
www.seilerinst.com

A Commitment to Excellence since 1945

Women in the Army: CW4 Anne Wiley (left), the senior standardizations instructor pilot for 7th Squadron, 17th Cavalry Regiment, and CPT Carmel Cammack, an assistant operations officer for the unit, prepare to reposition an aircraft at Kandahar Air Field.

enable the Army to assign female soldiers to more than 13,000 additional active and reserve component positions.

In addition to the positions identified under the colocation restriction, the Army requested to open closed positions that reside at the battalion level within active duty direct ground combat units. The positions consist of occupational specialties to which women are normally assigned outside of direct ground combat units below the brigade level. The Army has identified 10 officer and 10 enlisted occupational specialties in select units to open as an exception to policy, approval of which makes 755 Army positions at the battalion level available for assignment of both men and women in nine brigade combat teams composed of direct ground combat battalions.

Taking Care of Soldiers and Their Families

As a nation, it is our duty to care for the men and women who are wounded, injured or become ill as a result of their military service. In FY 2012, there are approximately 22,000 individuals in the Integrated Disability Evaluation System (IDES), and we anticipate this number will increase in FY 2013. Soldiers undergoing the disability adjudication are not available to meet unit operational and tactical requirements. In addition to having a significant impact on Army readiness, lengthy processing times create considerable personal frustration for servicemembers and their families.

The Army, working with our sister services and the Department of Veterans Affairs, has expanded the IDES to all soldiers, with the exception of those injured in initial entry training. This integration of the Department of Veterans Affairs' Disability Rating Activity Sites provides soldiers with a comprehensive statement of their rated disabilities before discharge from the Army or return to duty.

The U.S. Army has also embarked upon a process improvement and standardization effort for the IDES, with the goal to reduce the amount of processing time and frustration for soldiers, allowing them to either return to duty or enter the civilian sector in a more timely manner.

A decade of war has taken a toll on our soldiers and their families, and we continue to work aggressively to decrease behaviors related to stress, including substance abuse, domestic violence, sexual assault and, most tragically, suicide. The Army has partnered with the National Institute of Mental Health to conduct the largest study of mental health risk and resilience ever among military personnel. The five-year study will run through 2014, and findings will be reported as they become available so that the Army may apply them to its ongoing health promotion, risk reduction and suicide prevention efforts. Some preliminary findings tell us that suicide rates increased over time for soldiers regardless if they had never deployed, were currently de ployed or were previously deployed. Furthermore, the sui cide rate among women increased more than that of mer These findings will be thoroughly examined in the future.

Another indication of stress within the force is substanc abuse. Army substance abuse counselors play a vital role i maintaining the health and readiness of our force by cour seling and caring for soldiers battling this problem. Th Army continues to hire counselors to meet the industr standard ratio of one counselor for every 30 soldiers. We ar increasing the use of recruiting, relocation and student loa reimbursement incentives to attract more qualified cand dates, and we are developing an Army Substance Abus Program counselor internship program that will allow stu dents with master's degrees to work in a supervised interr ship for up to two years as they obtain their licenses an substance abuse counselor certifications.

Through the Sexual Assault Prevention and Respons Program, the Army continues to work towards its goal o eliminating sexual assault and harassment within ou ranks. Success in this area will depend upon aggressive, ac tive command leadership and engagement. It is imperativ that every Army soldier and civilian understand that w must create and maintain a climate that respects and value the dignity of every member of the Army family.

Our soldiers have performed superbly over the last 1 years of war and have displayed the values, character an competence that made us successful. As a nation, we valu their service and sacrifices, and we owe our soldiers an their families the best support possible. Army Strong!

Army Intelligence 2020: Enabling Decisive Operations While Transforming in the Breach

By LTG Mary A. Legere
Deputy Chief of Staff, G-2

The Army is at a turning point. Over the past decade, the Army has focused its efforts on fighting two wars and optimizing its structure, training and operational concepts to best address the threats and conditions encountered in Iraq and Afghanistan.

Today, even as our armed forces continue to support combat operations in Afghanistan, the Department of Defense is transforming to support a new National Defense Strategy and a complex range of threats and missions. In this transition, the Army will transform as well, ensuring that it can fight and win our nation's wars while satisfying combatant commanders' requirements around the globe. As the Army adapts, so will our Intelligence Corps, building on

insights gained from a decade of war to provide the most agile, multidiscipline intelligence force possible to support theater and Army warfighters at every echelon.

Nested with Army 2020 and through thoughtful investments in force structure, technologies and training, Army Intelligence 2020 will provide the capabilities and depth required to ensure that our Army remains globally engaged and capable of supporting decisive action in all current and future contingencies.

The Emerging Operating Environment

As we consider the evolving strategic landscape, it is clear the United States must be prepared to contend with a wide range of potential threats of increasing complexity. Iran, North Korea and conflicts arising from enduring fault lines in the Middle East, Asia and Africa will continue to be major concerns, as will the threats posed by transnational terrorists, insurgents and criminal organizations. Conventional and unconventional forces, irregular militias, and terrorist or criminal groups may act either independently or together to challenge our interests and those of our allies and friends. Networked and often independent of existing political orders, these groups will have access to a broad range of conventional weapons and sophisticated technology, which, if combined, could introduce unexpected and potentially catastrophic levels of lethality. Aided by information technology and social media, they will be able to mobilize in ways that can quickly confine, complicate, oppose, or disrupt our operations and global posture.

In this environment, while the United States remains militarily dominant, time for effective shaping and freedom of maneuver has decreased, thus increasing the need for active and early engagement, stronger partnerships and continuous assessments of developing conditions around the globe.

In these efforts, the Army will play a central role, providing combatant commanders with responsive, agile and regionally aligned forces capable of joint employment in the complex operating environments we envision in the future. In support of this, Army Intelligence will anchor the theater commanders' read of the human domain, building the regional depth and intelligence competencies required to enable timely and informed action by Army commanders at every level.

Technically proficient, globally engaged, and capable of harnessing the joint and national intelligence enterprise, our Army Intelligence Corps will provide the equipment, force structure and training to support our Army in its global and regional engagements. To accomplish this, Army Intelligence 2020 will focus on five complementary priorities.

Building the Best Intelligence Force

Over the past decade, the Army has fielded a wide range of intelligence, surveillance and reconnaissance (ISR) capabilities to support our forces on the ground in Afghanistan and Iraq. Investments in full-motion video (FMV), signals intelligence geo-location, exploitation of captured documents and media (DOMEX), biometrics, advanced analytics, and more robust human and technical collection have contributed to the Army's ability to conduct decentralized operations with the precision and timeliness required to be effective against a networked enemy.

Similarly, improvements in the Army's aerial ISR fleet and cyber and human intelligence capabilities, along with the maturation of the Army's Distributed Common Ground Station, have provided our soldiers with unprecedented access to the sensor data and fusion tools required to assist them with their many missions, while enabling collaboration with other analysts in the Army and the intelligence community.

Developed and refined in response to requirements on the battlefield, these capabilities are, and will continue to be, critical to our operational success. Sustaining the best of these in an era of declining resources is now at the center of our Intelligence Corps campaign to support Army 2020.

LTG Mary A. Legere *is the deputy chief of staff, G-2. She previously served as the commanding general, U.S. Army Intelligence and Security Command, Fort Belvoir, Va., and the deputy chief of staff, Intelligence, Multi-National Force-Iraq. LTG Legere has commanded at all levels, including the 501st Military Intelligence Brigade, Eighth U.S. Army, Korea; the 312th Military Intelligence Battalion, 1st Cavalry Division, Fort Hood, Texas; and Operation Joint Forge, Bosnia-Herzegovina. LTG Legere is a graduate of the University of New Hampshire and the Army War College.*

IN PRODUCTION. IN COMBAT.

IN DEMAND.

From contract award to combat in just 45 months, the AN/TPQ-53 is exceeding expectations. Providing soldiers with a level of 360° protection they never had before, and protecting soldiers from rocket, artillery, and mortar fire. Q-53. It's always been about the soldier and it always will be.

www.lockheedmartin.com/radar

100 YEARS OF ACCELERATING TOMORROW

LOCKHEED MARTIN

Sustaining and Expanding Support to Commanders

As support to ongoing operations in the Middle East, Africa and the Asia-Pacific attests, our intelligence force's active, early and persistent engagement is essential to our Army's effective employment in any theater. Army service component command G2s, aided by U.S. Army Intelligence and Security Command's (INSCOM) theater military intelligence brigades and aligned Reserve battalions, continue to expand the theater and Army commanders' understanding of the threats in their regions, the foundation for situational awareness and intelligence support for their assigned missions.

With demands for intelligence increasing, cooperative efforts among our theater military intelligence (MI) brigades, special operations groups, rotational forces and joint intelligence centers will be essential to ensure the best intelligence support for our commanders and soldiers in every theater.

Trained and Ready MI Forces

Our Army Intelligence team—active and reserve—must be organized to support identity resolution, timeliness and geospatial accuracy where risk to force is greatest. Over the past decade, the addition of FMV, DOMEX, multifunctional teams, aerial precision geo-location, and other technical collection and exploitation capabilities has provided our tactical commanders with the tools required to enhance their situational awareness, to protect their force and to execute decentralized operations. Ensuring we retain these enhancements for our soldiers at the tactical edge is one of our most important objectives for Army Intelligence 2020.

While these enablers were initially intended for briga combat teams (BCTs), the recent redesign of the BCT h provided the opportunity to consolidate these capabiliti at the next echelon, in the newly conceived MI brigade (e peditionary). The MI brigade offers a flexible, agile and ficient command and control construct for training, equi ping and tailoring these critical enablers for downwa reinforcement to the Army's divisions and BCTs as th prepare for worldwide deployment. Improved constru will also enhance our ability to support both our tacti and operational commanders' requirements with the unique and invaluable force multipliers.

Keeping Our Force Ready and Always in the Figh

In 2004, in response to shortfalls in our intelligence for in Afghanistan and Iraq, the Army Chief of Staff directed t Army G2 and INSCOM to establish t Army's Foundry Program to ensure intelligence deployers had the oppo tunity for live target and technical i mersion before deployment to eith theater. The Foundry Program pr vided a menu of target-specific, mul discipline intelligence-immersion e periences to support Army for generation units before deployme Since then, more than 90,000 soldie airmen and marines were trained u der the program, resulting in a dr matic improvement of our Intelligen Corps' performance in Iraq, Afgha istan and other theaters. Now herald by U.S. Army Forces Command a combat arms commanders as one the most significant contributors Army readiness in the past decad

Foundry has been institutionalized as a fundamental enabler in our Army's approach to sustaining readiness.

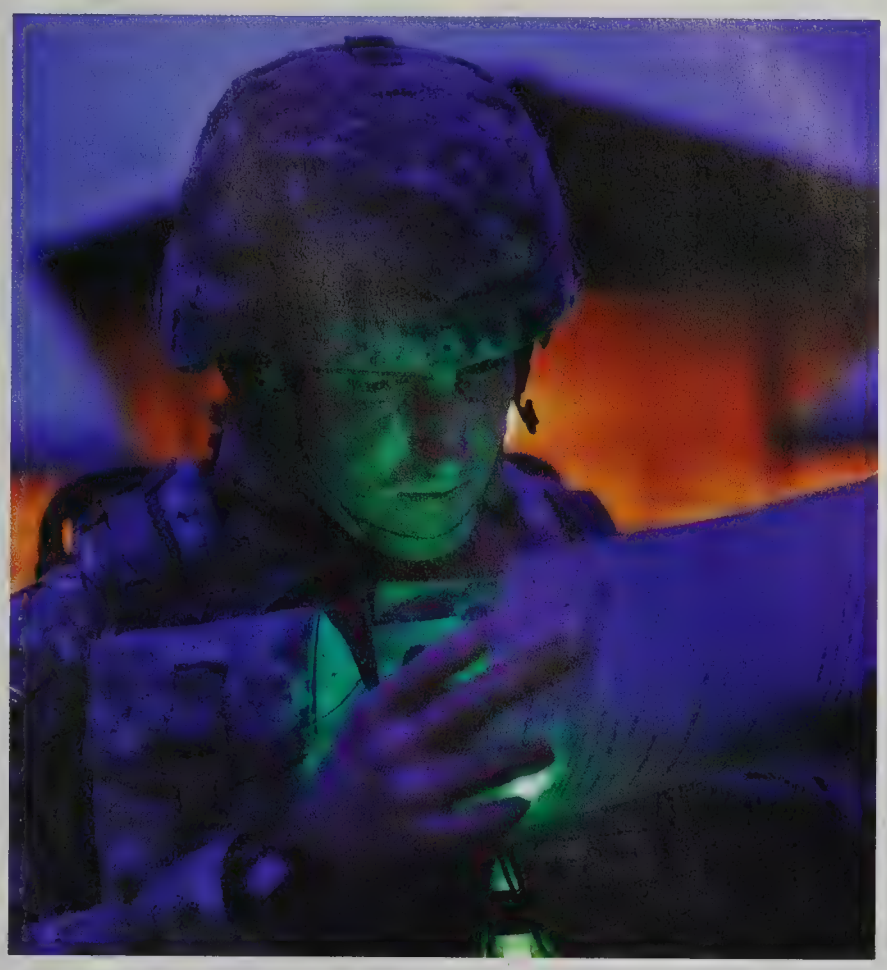
Equally important, in order to support our Army Intelligence 2020 goal of "no MI soldier at rest," Foundry is now employing MI soldiers in dwell against live theater collection or production requirements, providing expert support to our Army forces forward, while sustaining hard-earned individual and unit readiness at home station for future contingencies.

As we strive to be good stewards of our nation's resources, our goal is to ensure that every MI soldier is actively engaged in the fight against a complex and adaptive enemy, whether deployed or at home. In the years ahead, as the regional alignment of Army units increases, our Foundry platforms will provide countless opportunities for our soldiers to contribute, assisting Army 2020's rotational forces with the execution of their regional missions, while sustaining a corps of Army Intelligence professionals who are better prepared for deployment, possess greater functional and regional expertise, and are more closely linked to the broader intelligence community.

Solutions for Today's Fight—and Tomorrow's

Among the greatest challenges we face is the pace of change, both in technology and in the conditions we find in each theater. As a result, even as we integrate the new capabilities into our intelligence force, we must constantly upgrade the equipment, the tools and the advance skill training that we provide to ensure that our intelligence formations arrive in theater with the right skills and equipment to remain on the forward edge.

In this spirit, as part of Army Intelligence 2020, we will continue to bring the Army's LandISRNet vision to reality, retaining an expeditionary approach to ensuring that our Army's foundational, terrestrial, aerial and cyber layers represent the very best capabilities available to our intelligence community.



Working with joint, multinational and industry partners, we have a number of exciting opportunities to accelerate our progress towards the Intelligence 2020 end state, including the ongoing Distributed Common Ground Systems-Army (DCGS-A) migration to the intelligence community cloud, the instantiation of Relevant Intelligence to the Edge, the continued maturation of our fully integrated aerial, ground and cyber sensors, and the build-out of the Army's Foundry and Security Resiliency Programs.

Soldier-led initiatives to redesign our DCGS-A user interface for ease of use, to expand Foundry pilots, to create integrated sites and to execute the first-ever operational deployment of the Army's Long Endurance Multi-Intelligence Vehicle ISR platform are just a few of the many planned initiatives, all of which will contribute significantly to the expansion of our capabilities for Army commanders at all echelons.

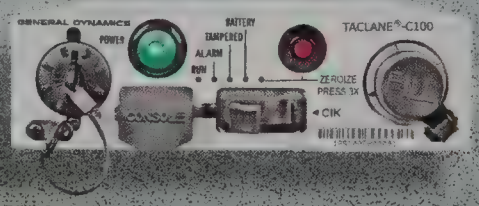
As we look ahead, it is clear the intelligence challenges that our Army and our Intelligence Corps will face will only grow more complex, requiring greater cohesion, interoperability and collaboration across our force. In this effort, Army Intelligence 2020 will provide the Army with the force structure, capabilities and skill sets to allow our commanders and our warfighters to move forward to gain access to the intelligence and technology that are available, to answer the critical questions, and, ultimately, to survive and succeed in the complex environments we envision in the future. ★

Don't sweat the COMSEC.

Secure and ready when you need it.

Incorporating **NSA-certified Suite B** encryption, the **TACLANE®-C100** encryptor secures information classified Secret and Below without the burdensome handling requirements of COMSEC equipment.

www.gdc4s.com/c100



GENERAL DYNAMICS

© 2012 General Dynamics. All rights reserved.

A New Direction: A Balanced Army for the Future Strategic Environment

By LTG John F. Campbell
Deputy Chief of Staff, G-3/5/7

America's Army, the most decisive land force in the world, remains engaged in sustained combat against determined enemies. The Army is committed to balancing the current global security demands with a realistic strategy that maintains American landpower. America's dominance in landpower remains unchallenged, and it is imperative that the Army's total force (active, Reserve and National Guard) remains ready and relevant in this era of persistent engagement. This is the Army's strategic vision within which we lead, think, train and fight to ensure we remain the nation's force of decisive action.

Our Army continues to face a global security environment that is dynamic, uncertain and complex, characterized by an accelerating rate of change. Given the variety

U.S. Air Force/SSgt. Timothy Chacon

SGT Brian Reid, Alaska National Guard, assigned to the Kandahar Provincial Reconstruction Team, talks with an Afghan child during a dismounted patrol of a department of public works facility in Kandahar Province, Afghanistan in August.

of threats, the Army must continually reassess its capabilities to ensure we provide agile leaders, capable soldiers and lethal units to combatant commanders. As the Army G-3/5/7, my immediate priorities are winning the current fight, sustaining the all-volunteer force, maintaining trained and ready forces, and increasing future force capabilities based upon lessons learned from more than 10 years of war.

LTG John F. Campbell *assumed the duties of the Army Deputy Chief of Staff, G-3/5/7, in 2011 after serving as the commanding general of 101st Airborne Division (Air Assault) at Fort Campbell, Ky., from 2009 to 2011. In June 2010, he deployed the division and assumed command of Combined Joint Task Force-101, Operation Enduring Freedom, Afghanistan. During more than 32 years of service, he has commanded units at every echelon, from platoon to division. LTG Campbell's additional command assignments include Operational Detachment Alpha commander in 1st Battalion, 5th Special Forces Group (Airborne) at Fort Bragg, N.C.; commander, Bravo Company, 3rd Battalion, 505th PIR, Fort Bragg; commander, 2nd Battalion, 5th Infantry Regiment, 25th Infantry Division, Schofield Barracks, Hawaii; and commander, 1st Brigade, 82nd Airborne Division and the 504th Parachute Infantry Regiment, Fort Bragg (deployed during Operation Enduring Freedom). LTG Campbell graduated from the U.S. Military Academy in 1979, branched Infantry, and is a graduate of the Command and General Staff College and the Army War College.*

The New Direction

Our nation is at a strategic turning point after a decade of conflict in Iraq and Afghanistan. The conflict in Iraq ended successfully. We are still engaged in Afghanistan, helping the Afghan people make the transition to self-governance. In January, the Secretary of Defense released a new defense strategy driven by a reexamination of the nation's security needs and a fiscally constrained environment. The new strategy reexamines the global context and shifts focus to emphasize the Asia-Pacific and Middle East regions, with central intent on strengthening important alliances and building new partnerships around the world. Our Army is essential to the new strategy, which envisions a postwar Army that will be leaner, agile and flexible enough to defeat multiple threats simultaneously. To implement the new defense strategy, I want to highlight several initiatives—leader development, training, support systems, force structure, Army future Force Generation and regionally aligned forces—that will ensure we have the Army our nation needs to meet the security challenges of the future.

Leader Development

Leadership makes a difference. The Army has long taught that leadership is a lifelong commitment; 10 years of war demonstrate how much that commitment matters. Two theaters of war consumed our Army, and the adaptability and flexibility of our soldiers contributed immeasurably to mutual understanding, transparency and trust with our allies and, most important, with the people of Iraq and Afghanistan. Our leaders' judgment, shaped by military training, education and combat experience, provided our nation with a decisive advantage over our adversaries. The leadership lessons learned from war and its obstacles will remain valuable as we shift to a postwar environment.

Training, education and experience will be the pillars of our leader development strategy. First, we recognize the challenge of leading combat-experienced soldiers who know our Army and missions only from the perspective of war in a garrison environment. Leading soldiers who have endured the effects of war will be a priority. The Army knows that good leadership helps mitigate the negative effects of war. We will take advantage of the positive lessons learned to instill internal discipline and maintain the profession of arms. Second, the obvious lessons require that leaders and soldiers maintain proficiency in core competencies and be able to fight in joint, interagency and combined environments. In light of our transition from a force fo

AH-6
ARMED AERIAL SCOUT

ONE SCOUT LEADS THE PACK.

The AH-6 Light Attack/Reconnaissance Helicopter offers superior capability for the Army's Armed Aerial Scout mission. The most advanced integrated cockpit. Commonality with the Army's Apache Block III helicopter. Flexible weapons configuration with four pylon stations. Networked, including UAS connectivity. And with a full mission load, it's demonstrated hover-out-of-ground-effect above 6k/95° F. Capability ahead of the pack. That's AH-6 AAS.

BOEING

PVT Sean Wright, a Stryker fighting vehicle systems maintainer with 702nd Brigade Support Battalion, 4th Stryker Brigade Combat Team, 2nd Infantry Division, works on the engine of a Stryker at the National Training Center at Fort Irwin, Calif., in June in preparation for a fall deployment to Afghanistan.

cused on predictable counterinsurgency deployments against threats found in hybrid settings to a force of decisive action, we will develop leaders who understand the context of the environment, including political, ideological, social and military actions. Finally, in coordination with the U.S. Army Training and Doctrine Command, the G-3/5/7 is updating and implementing the Army leader development strategy focused on addressing leader development imperatives.

Training Support Systems

The uncertainty of the future, the complexity of the threat and the necessity to be able to operate across joint and combined arms lines mean leaders and soldiers must increasingly develop their understanding of doctrine and their ability to effectively plan and resource training. Our training strategy, when adaptability is paramount, will posture the Army for the future strategic environment and be cost-effective in a peacetime environment. To this end, we will use our investments in integrating live, virtual, constructive and gaming technologies to take better advantage of limited training and resources. Using this constructive integration best incorporates joint, interagency, intergovernmental and multinational partners into critical home-station training. Another essential element of training is the understanding of doctrine and application of training management skills into a force that has been singularly focused on a specific theater and operational approach for many years. Modifications to the Force Generation process will also alter the frequency and number of events that enable the training support system. Active component forces will receive realistic and challenging training at combat training centers (CTC) and reserve component forces will continue to train in accordance with the 60-month Force Generation process, including CTC rotations for those units in the rotational force pool.

Force Structure

Our future Army will continue to provide combatant commanders with a total force that is agile and versatile and has depth. Force structure supports this new strategy by addressing our regional goals. Although the force will be smaller, it must be more adaptable to respond quickly to potential enemies anywhere, anytime.

In response to a changing operating environment and a new defense strategy, the Army will reduce its active duty end strength to 490,000 by fiscal year (FY) 2017 and roughly 350,000 in the Army National Guard by FY 2018; the U.S. Army Reserve will maintain its current end strength at 205,000. These reductions afford the Army the opportunity to reinvest structure in several capabilities, including contracting specialists, cyber operations, four fires brigade

UH-60 Black Hawk helicopters airlift 105 mm howitzers at Fort Drum, N.Y., in July. The soldiers are assigned to 1st Battalion, 258th Field Artillery; the helicopter crews are assigned to Army Aviation Support Facility 3 in Latham, N.Y.

Making a **Difference** in the World

Day & Zimmermann is proud to manufacture the highest quality ammunition available today -- a mission critical function we have supported for more than 70 years. With a diverse portfolio of production facilities and complementary capabilities that include Load, Assemble, Pack (LAP), storage and demilitarization, we get the job done safely and with integrity.

Day & Zimmermann facilities are ISO 9000 certified and our products undergo comprehensive testing and evaluation to ensure that only the highest quality and safest munitions are produced. Day & Zimmermann munitions are built to consistently exceed the requirements of the U.S. Department of Defense.

Worldwide Headquarters: Philadelphia, Pennsylvania, USA
Telephone: (215) 299-8000

Day&Zimmermann
We do what we say.

dayzim.com

American Ordnance
We do what we say.

aollc.biz

CLOSE COMBAT

INDIRECT FIRE

DIRECT FIRE

ENERGETICS & COMPONENTS

EMERGING TECHNOLOGIES

O2S
Oxygen Systems

SGT Timothy Collins, 66th Military Intelligence Brigade, tackles the rope bridge at the obstacle course during U. S. Army Europe's Best Warrior Competition in Grafenwoehr, Germany, in July.

headquarters (one of which is in the National Guard), 7th Infantry Division Headquarters at Joint Base Lewis-McChord, Wash., and an indirect fire protection capability. We will inactivate at least eight active component brigade combat teams, a corps headquarters and the enablers commensurate with the reduction of brigade combat teams. We are also considering a redesign of the brigade combat teams to provide more capability and adaptability critical to the role they will play in shaping the regional environments in support of geographic combatant commanders, as well as responding to missions across the range of military operations.

Army Future Force Generation

Investment in our readiness will remain a strategic necessity and a matter of priority. Army Force Generation enabled us to put the Army on a rotational readiness cycle to continuously provide cohesive units to combatant commanders for enduring missions. Currently, Force Generation is a cyclic process, continuously adjusting training, equipping and manning of our units to suit the requirements of emerging missions. We are now coming to grips with the fundamental change that is required to realign our institutional systems to support this future Force Generation model, one that supports combatant commanders and the new strategy through better cost-controlling refinement.

The future Force Generation process organizes Army units into three distinct force pools: the mission force pool, rotational force pool and the operational sustainment force pool. The mission force pool is occupied by high-demand, low-density units and other unique capabilities that require high levels of readiness. The rotational force pool contains the vast majority of conventional force active and reserve units. These units will continue to execute progressive readiness. The operational sustainment force pool contains active and reserve forces that must be prepared to meet the force requirements of select operational plans. Based on demand, select conventional forces will be placed in the mission force pool specifically to align with the special operations forces. These units will maintain company-level readiness for active components and platoon-level readiness for reserve components. The reduced readiness requirements of the operational sustainment force pool enable the Army to maintain vital capabilities with fewer resources and retain the ability to surge forces to the warfight.

Regionally Aligned Forces

Our future posture, through regional alignment, will re balance toward Asia-Pacific, foster continued special opera tion forces/conventional forces synergy, and strengthen rela tionships and interoperability with allied and partne armies. We will shape the strategic and operational environ ment by building cooperative security, deterring aggressio and establishing the preconditions for future operation should crises arise. The Army is uniquely suited to set condi tions necessary to maintain peace and stability and, whe necessary, to prevail in conflicts. Since most foreign militarie are army-centric, the relationships the Army has develope with allies and partners are important in developing the trus and confidence necessary to form multinational coalitions.

Army service combatant commanders have the enduri capability and persistent presence to influence both adve saries and allies and provide our forces with peacetime an contingency access. To be more responsive to our geo graphic combatant commanders and better enable our join interagency, intergovernmental and multinational partner we will use a combination of assigned and rotational force to conduct training and exercises. Essentially, the Army wi provide a persistent and visible presence for deterring ad versaries and reassuring allies by supporting the geographi combatant commanders' security cooperation strategies.

The Strength of the Nation

The Army remains vital in its role to prevent conflic shape the global environment and decisively win our na tion's wars. America's Army has provided service to the na tion through a decade of conflict in two different theater and our strength for the future will be landpower, an essen tial advantage of American military power. The security o our nation is the result of the selfless sacrifices of men an women who come from every corner of the United States t protect the freedom and democracy of this great nation America's Army will continue to provide "Service to th Nation and Strength for the Future." ★

Army 2020:
Top Four Logistics Priorities

By LTG Raymond V. Mason
Deputy Chief of Staff, G-4

With the Afghanistan drawdown under way and the combat mission in Iraq over, I gathered the G-4 leadership team earlier this year and asked, "How can logisticians—and the DA G-4 specifically—help the Army prepare for the challenges of an uncertain strategic and operational environment while at the same time leverage the opportunities of the coming decade?" Army logisticians, along with our superb joint partners, performed magnificently over these past 11 years of sustained combat, helping create the best-fed, best-equipped, best-maintained Army we have ever had since 1775. We cannot rest on our laurels, however. We must focus our efforts on helping shape an Army for 2020; this is especially critical in an era of diminishing resources.

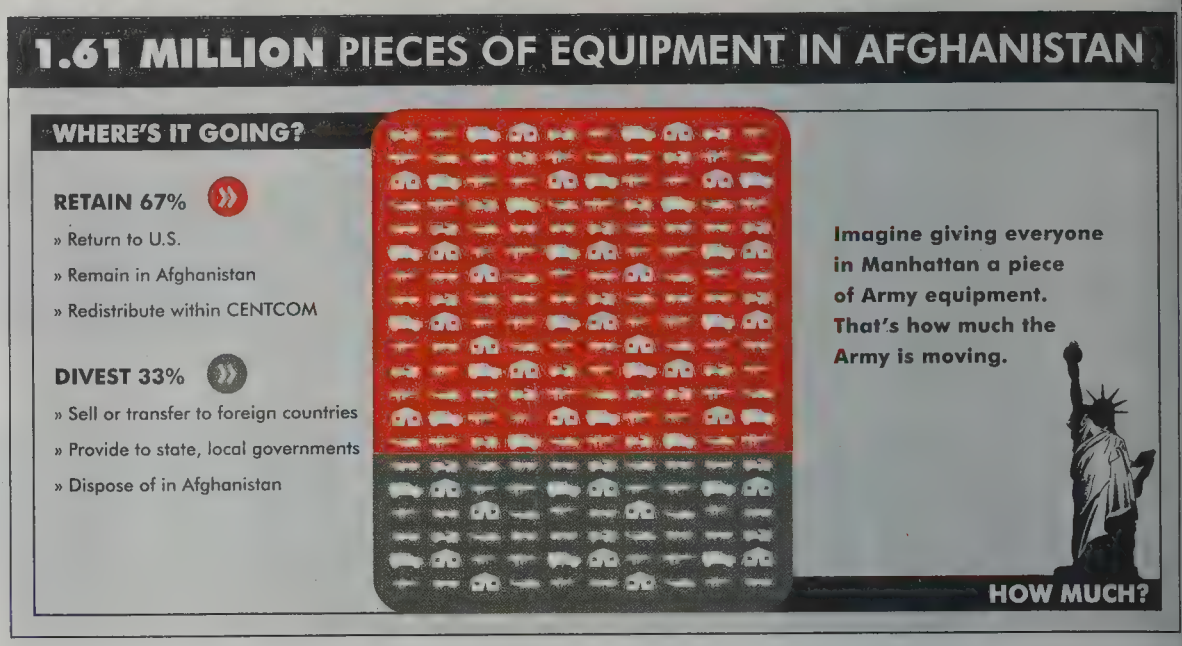
During this session, we reviewed Chief of Staff of the Army GEN Raymond T. Odierno's vision of an Army that has three vital capabilities: prevent warfare, shape conditions and, most important, win. As we looked into this uncertain future, we viewed it through the lens of the President's new strategic guidance; the Secretary of the Army's priorities; the Army Campaign Plan; shrinking defense budgets and reduced force structures, which historically occur following wars; and cutting-edge technology that can truly revolutionize logistics to help create a more agile and versatile Army.

We developed four top logistics priorities. They will help guide the Army-wide Log Nation this year and in the years to come.

First, although the drawdown in Operation Enduring Freedom has started, we are still fully engaged in Afghanistan, so our primary focus remains sustaining our soldiers in the fight while continuing to plan for the end of combat operations in 2014. The close-out of Operation New Dawn was hugely successful, thanks in large part to the superb planning and execution of the drawdown, and we want to ensure the same success in the Afghanistan drawdown/retrograde.

Second, we must continue to improve property accountability so that all records are complete, accurate and auditable, and assets are redistributed to where they are most needed. As I travel around the Army, I'm encouraged to see commanders and soldiers truly getting after property accountability.

Third, the Global Combat Support System, better known as GCSS-Army, which will revolutionize Army logistics, will be fielded this year. It is a technology 10 years in the making and has the potential to change Army logistics just as Facebook changed the way the world socializes.



Fourth, we are going to field operational energy capabilities more rapidly, which will help reduce our logistics footprint in the theater, cut costs, save energy and, most important, put soldiers at less risk.

Now let's take a closer look at these four priorities.

Afghanistan: Responsible Drawdown And Retrograde

"Afghanistan is orders of magnitude more challenging for … [withdrawal] than was Iraq."
—Ashton B. Carter, Deputy Secretary of Defense

We have more than 1.6 million pieces of equipment in Afghanistan, valued at $29 billion. That is about half as much equipment as we had in Iraq when we started the drawdown there, but it is still a significant percentage of total Army resources. Imagine giving every person living in Manhattan a piece of equipment—an M-ATV, a cargo truck or a Humvee. That's how much equipment our soldiers will need to move out. In addition, we'll need to retrograde ammunition, shut down supply support activities, close bases and bring the troops home.

It would be convenient if we could just replicate the drawdown/retrograde process we so successfully executed in Iraq and apply it to Afghanistan, but Afghanistan has many unique challenges. The road network is limited; there are no viable railways and no seaports; there are many political constraints to the external routes out of Afghanistan; there is currently no staging base like we had in Kuwait; the Afghanistan forces do not have the ability or need to absorb as much equipment as the Iraq Army did; and our coalition partners must also draw down. Consequently, the Afghanistan drawdown will likely be five to 10 times more challenging than that in Iraq. With the incredible adaptability of the Army team, however (along with that of our outstanding U.S. Transportation Command partners), I am confident we are up to the task.

Of course, there are lessons we learned in Iraq that will help us meet these challenges. Among those is to make timely decisions on equipment disposition so that we can plan where everything should go and get it to the right

LTG Raymond V. Mason *is the Deputy Chief of Staff, G-4. Previously he served as the G-4, U.S. Army Forces Command. He has also served as commanding general of 8th Theater Sustainment Command, Fort Shafter, Hawaii; 19th Support Command (Expeditionary), Daegu, Republic of Korea; Defense Supply Center Philadelphia, Defense Logistics Agency; and Army Materiel Command (Theater) Southwest Asia. In addition, he was C-4, Operational Sustainment, Coalition Forces Land Component Command, Central Command, providing logistics support to U.S. forces operating in Iraq, Afghanistan, Kuwait, Djibouti and across the U.S. Army Central area of responsibility. LTG Mason received master's degrees in procurement/contract management from Florida Institute of Technology and in national resource strategy from the National Defense University.*

LISTEN UP!

Your robot just got better. The Throwbot® XT from ReconRobotics now has sophisticated listening capabilities that you have to hear to believe. Throw it over a compound wall or through a window and you'll immediately obtain video *and* audio reconnaissance that protects your fire team from hidden threats and improves the success of your mission.

Throwable to 120 feet. Infrared equipped – and still just 1.2lbs.

The Throwbot XT – *Saving Lives At The Tip Of The Spear* ™

Ernest Langdon Director of Military Programs - U.S.
Ernest.Langdon@reconrobotics.com 703-217-6017

AUSA Booth 8009

RECON ROBOTICS™

WORLD LEADER IN TACTICAL MICRO-ROBOT SYSTEMS

www.reconrobotics.com

THROWBOT XT

KNOW BEFORE YOU GO®

place economically. To maximize the effectiveness of the retrograde process, we will need two to three years after cessation of hostilities to reset and ready the equipment for whatever the next mission the nation asks of the Army. U.S. Army Materiel Command, as the Army's lead materiel integrator, is playing a central role in this effort, including total equipment visibility and rapid redistribution.

We plan to retain about 67 percent of the equipment, whether it is to return to the United States to fill Army shortages, redistribute into Army prepositioned stocks, provide to the State Department, or other uses. The remaining 33 percent will be divested, either through foreign military sales or transfers to our allies, provided to state or local governments, or disposed of with the help of our Defense Logistics Agency partners.

Through it all, we want to bring a decade of war to a successful end, to a state in which Afghans can take full responsibility for the security of their nation and in our shared goal of defeating al Qaeda and its extremist surrogates.

Property Accountability: Personal and Leader Responsibility

"Supply discipline and property accountability is everyone's responsibility."
—GEN Lloyd J. Austin III, Army Vice Chief of Staff

In 11 years of war, the Army has fielded an unprecedented amount of new, complex equipment and positioned it around the world with incredible speed. To do this, however, we have to sometimes cut corners, and basically it's as if we have been running a car rental company, whose units didn't necessarily own equipment but just "borrowed it." It was the right thing to do at the time, but it also created unintended consequences in the areas of responsibility and accountability.

Consequently, in 2010 the Chief of Staff of the Army directed the establishment of the Campaign on Army Property Accountability to reinvigorate supply discipline. The good news is that leaders and soldiers are actively pursuing the accountability mission. Units across the active, Reserve and National Guard components have used the campaign to reaccount, redistribute or turn in excess property. As a result, we've reallocated $57 billion worth of equipment across the force in the last two years. There have been 6,000 property accountability training and mentoring events and 30,000 unit-level command supply discipline program inspections across the Army. The bottom line is that commanders and NCOs are serious about property accountability.

Nevertheless, there is always room for improvement. This spring, MG Timothy McHale led a Vice Chief of Staff of the Army-directed Army property accountability review and identified a number of friction points and gaps. As a result of this review, we have made process and policy changes and are using new leading indicator metrics to better measure property record accuracy.

All leaders, upon taking command of a battalion or brigade, must sign a statement acknowledging their responsibilities for the property under their charge. At the Headquarters, Department of the Army level, we are spotlighting different accountability areas and metrics every quarter, gathering reports from every unit in the Army to track progress, and reporting trends to the senior Army leadership. It is paramount that we do this right and be good stewards of our precious resources to ensure that we are both effective and efficient. The CSA-directed goal is to have all property brought to record, with all records complete and accurate, by December 2013, well ahead of Congress' requirement to be auditable by 2017.

Global Combat Support System-Army (GCSS-A)

"GCSS-Army gives leaders and operators transparency and a common operating picture at all levels of logistics."
—CW3 Gregory W. Besaw, Army Logistics University

As we've been fighting two wars, logistics information technology that can help shape Army 2020 has not stood still. GCSS-A has been under development, and beginning later this year it will be fielded to tactical and installation supply warehouses. This will produce a huge leap in the Army's ability to see ourselves and especially "lean out" our processes.

GCSS-A, the largest enterprise resource planning system in worldwide production, will replace 40,000 local databases with one common master logistics database. Embedded in it is a financial function, so for the first time logistics and financial actions will be linked. This is critical to achieving clean audits, as mandated by Congress.

We successfully tested it at the National Training Center and at Fort Bliss, Texas, and soldiers are already seeing the benefits. WO2 Romulo Santos, a battalion maintenance technician, said his "aha" moment was when he simply pushed a button and got his equipment status report, something he used to spend five hours researching parts to produce

A soldier from 1st (IRONHORSE) Brigade Combat Team, 1st Cavalry Division, works through hand receipts during equipment draw operations at Camp Arifjan, Kuwait, in January.

Small, Lightweight
Unit
Day/Night Capability+

MOSKITO

Compact, Fully Integrated
Day/Night Handheld with
Digital Magnetic Compass

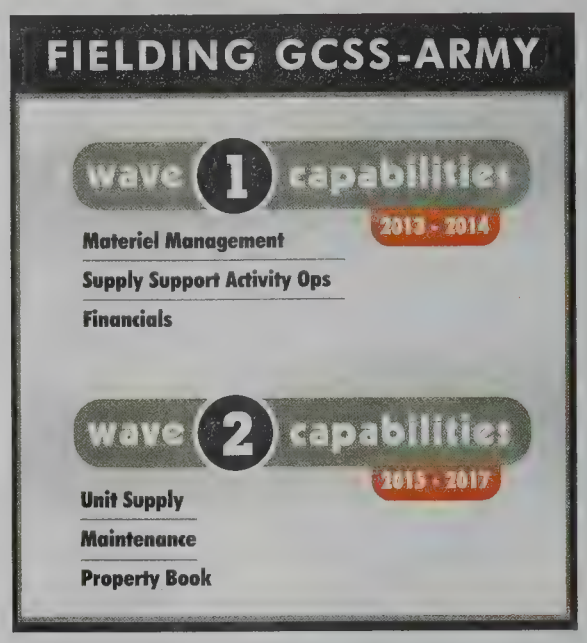
+ GPS and Bluetooth® optional
+ Ruggedized
+ Efficient Power Consumption
+ Weight With Batteries: 2.65 lbs

Vectronix Inc. | www.vectronix.com

vectronix

Clerks, who used to perform just one task at a time, can now work on multiple screens to open and close dispatches and order parts, greatly increasing their productivity.

The first fieldings will begin this fall at Fort Lee, Va., with Army National Guard units in Virginia and Army Reserve units at Fort Bragg, N.C. Fieldings will expand each quarter; within five years more than 160,000 logisticians worldwide will be using GCSS-A daily. It will touch every company throughout the Army.



We have created a GCSS-A training program, and we are ramping up a help desk to assist users. The key to success is that all soldiers are GCSS-A-ready before the program shows up on their screens.

Like all technologies, there is a new look, all-new terminology and new feel to it, so productivity could initially dip before users are fully up to speed and see the huge benefits. So 180 days before GCSS-A is turned on, commanders need to aggressively clean up their data and ensure that every soldier conducts online training. With GCSS-A we will truly have a 21st-century combat log information and management tool.

Operational Energy

"As we deploy, we have to develop ways where we save energy and reduce the cost."
—GEN Raymond T. Odierno, Army Chief of Staff

In the last decade we have seen the Army's energy needs skyrocket. Today soldiers on a 72-hour mission in Afghanistan must carry 70 batteries of seven different types, weighing 16 pounds, to power up their night-vision goggles, optics, communication gear, flashlights and global positioning systems. Right now, to support one soldier on the battlefield requires 22 gallons of fuel per day; during World War II it was only one gallon per soldier.

This increased energy consumption is a burden on the unit as well as a huge funding and resource requirement, and most strikingly it is an opportunity for the enemy to interrupt our combat operations. Every time a convoy moves fuel, soldiers are exposed to enemy fire and improvised explosive devices. The more fuel that is needed, the more storage is required, so our forward operating bases must be bigger, and therefore more security is needed. Second- and third-order effects of the huge demand for fuel on the battlefield create friction and risk; thus it is imperative that we reduce our operational energy needs as we execute effective combat operations.

This year, the DoD is investing more than $1 billion in operational energy improvements. The challenge is to understand how we use energy to get the most out of this precious resource. To do this, we are fielding more fuel-efficient generators, solar panels, water recycling and micro grids, and finding ways to give soldiers lighter and rechargeable batteries, so that they can lighten their combat loads.

As an institution, the Army must change, but so, too, must the culture. It's like changing one's diet: There are lots of ways to eat healthier, but it starts with the right mind-set. The individual's and the unit's will to incorporate energy changes into their lives and functions is essential to success. It's all about executing energy-informed operations.

Army 2020

Having met every challenge we've faced in the last decade, I'm certain logisticians will continue to lead positive change to ensure that we remain the best-fed, equipped and sustained Army in the world. By focusing on supporting the fight in Afghanistan while we execute a responsible drawdown, improving property accountability, fielding GCSS-A, and incorporating operational energy technologies, we will help build an even more agile and effective Army in this decade and into the decades to come.

Logisticians are Army Strong! ★

Soldiers with the 1st Brigade Combat Team, 82nd Airborne Division, conduct hands-on training with the Rucksack Enhanced Portable Power System in Afghanistan. The 10-pound battery-recharging kit runs on renewable energy using a solar panel.

UNMANNED SYSTEMS

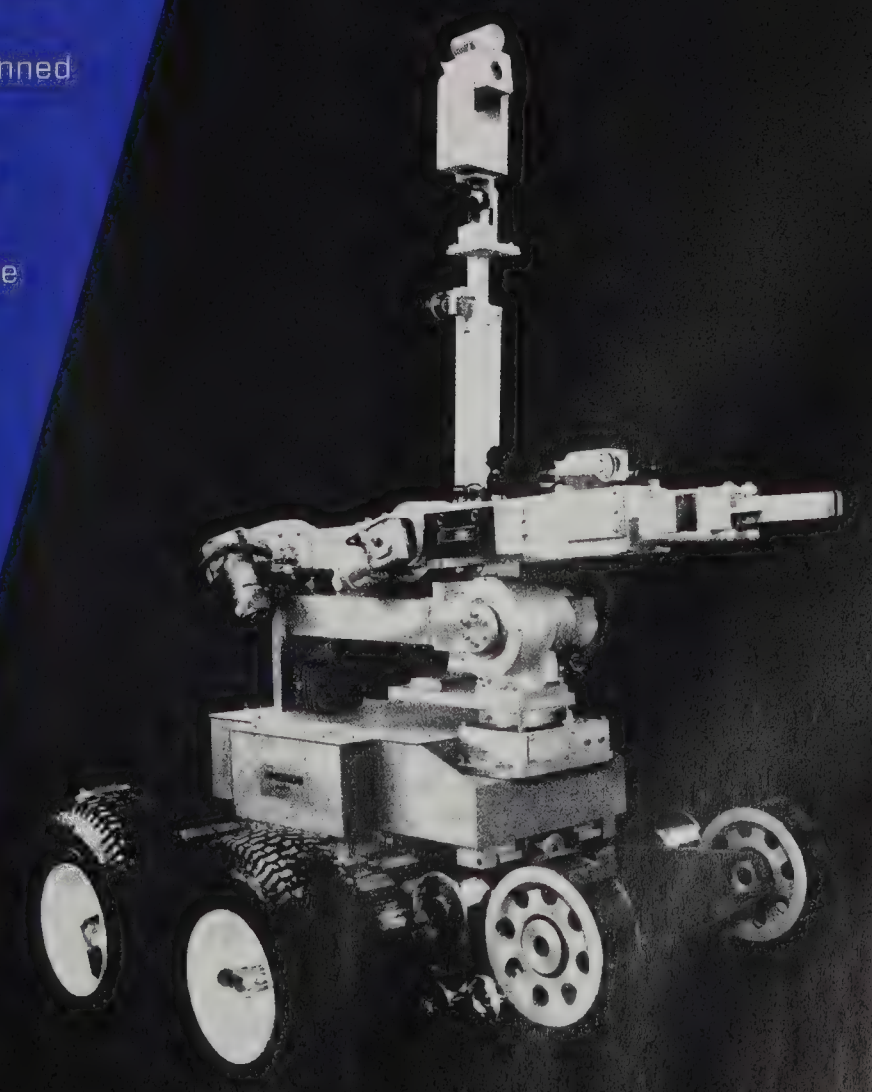
THE VALUE OF COMMANDING UNMANNED POWER.™

When you can go where others can't, you gain a powerful advantage. From undersea to outer space, Northrop Grumman is at the forefront of every aspect of unmanned systems. Our advanced platforms and technologies offer customers a wide range of new capabilities—resulting in greater safety, reduced costs, and improved mission effectiveness. *That's why we're the leader in Unmanned Systems.*

THE VALUE OF *PERFORMANCE.*

NORTHROP GRUMMAN

www.northropgrumman.com/**ums**



© 2012 Northrop Grumman Corporation

Visit ibm.com/federal/cto

$1,000,000,000,000*

Estimated government savings over the next 10 years.
IBM cost takeout solutions for federal government.

*And according to some industry leaders, it could mean saving up to 1 trillion taxpayer dollars over the next 10 years. This is an estimate only.

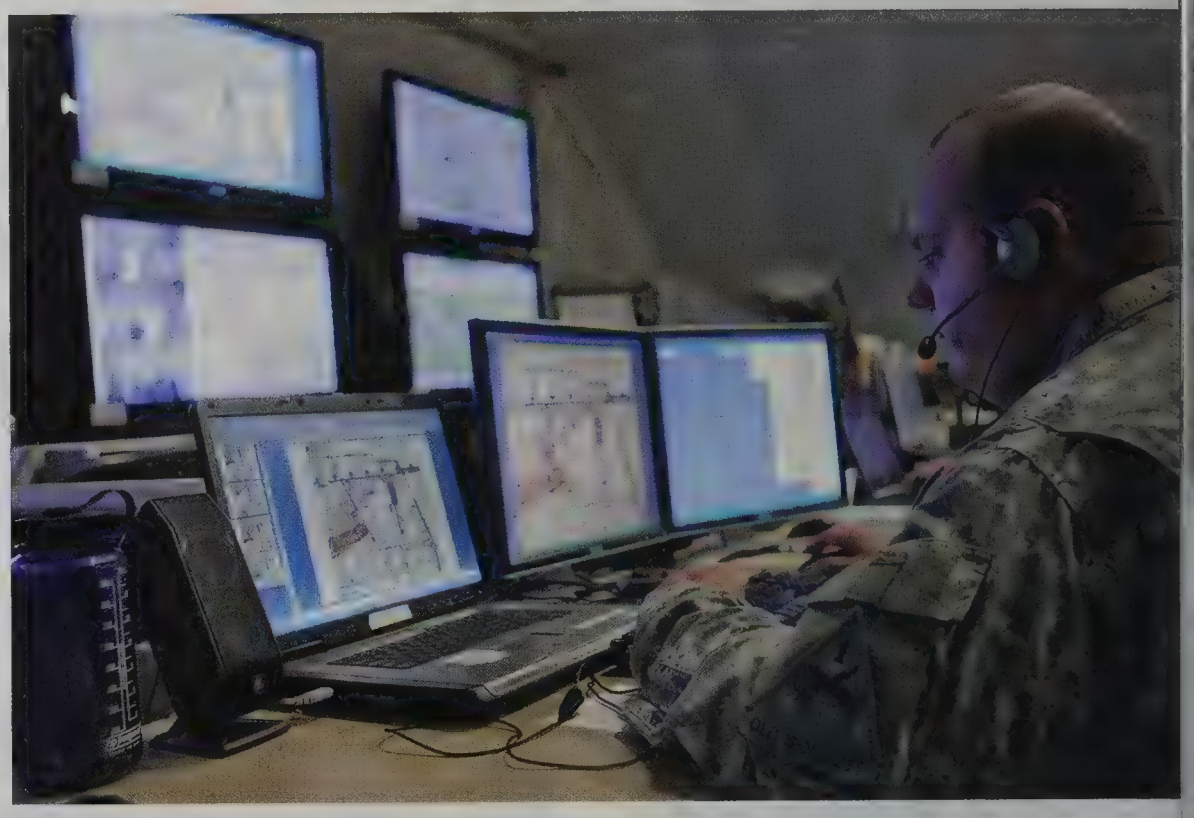
IBM, the IBM logo, ibm.com, Smarter Planet and the planet icon are trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the Web at www.ibm.com/legal/copytrade.shtml. © International Business Machines Corporation 2012.

LandWarNet: Powering America's Army In a Joint, Interagency, Intergovernmental And Multinational Environment

By LTG Susan S. Lawrence
Chief Information Officer/G-6

As 2013 approaches, the United States faces a peculiar dichotomy. On the one hand, persistent, increasingly sophisticated state and non-state threats, especially cyber and unconventional weapons, emanate from the farthest reaches and call for a joint, coalition and interagency response. On the other hand, an economic environment dictates declining budgets, declining end strength and a smaller global footprint. To be successful in these circumstances, the Army needs to be able to do more with less—fewer people and fewer dollars. The force and efficiency multiplier that will allow the Army to maintain operational superiority while being fiscally responsible is "the Network."

Already, the Network, known as LandWarNet, is fundamental to everything the Army does. In the



Soldiers monitor input from the Tactical Operations Center at an Early Infantry Brigade Combat Team Limited User Test (LUT) at White Sands Missile Range, N.M. The LUT included several systems, among them Small Unmanned Ground Vehicle and Class I Unmanned Aerial Vehicle.

field, command, control and communications; data acquisition and transmission; intelligence gathering and dissemination; situational awareness; targeting; logistics; the call for medical evacuation; and the call or email home to keep in touch with loved ones all rely on the Network. The daily business of the Army—training, financial management, human resources, research, acquisition and sustainment—also depends upon the Network. What happens, though, when the number of soldiers and civilians decreases? Just like the private sector, the technology that is already integral to our operations—warfighting and business—becomes even more critical to getting the job done.

For the Network to meet the needs of the Army and the joint force, it must be designed, built and managed in a markedly different way than ever before. Over time, the Network's infrastructure, which was largely constructed in a piecemeal fashion, has grown antiquated and vulnerable, undermining connectivity, access, security and interoperability. Recent operational requirements fostered stovepiped acquisition practices that produced unnecessary duplication. Throughout it all, information technology (IT) spending has been disjointed and opaque, inhibiting efficiency and the Army's ability to achieve economies of scale. While this network has not yet failed the Army, the future demands something better.

That better network must have certain essential characteristics: It must be much less complex; offer assured, secure access; support joint operations; and enable an expeditionary Army that trains as it fights. Change will begin at the most basic level: The Army must assume an end-to-end approach that treats the Network as one comprehensive entity for the entire force, from the stateside desk in garrison to the lone soldier at the farthest reaches of the tactical edge. In practical terms, the most important objectives of an end-to-end approach are establishing a single network provider, addressing installation and infrastructure requirements with the same vigor as tactical needs, and radically reforming information technology governance. These three seemingly simple ideas are central to providing the universal access, flexibility, security and constant modernization the Army and its partners need.

One Network, One Provider

Instituting a single provider for the entire Army, rather than allowing hundreds of organizations to build and administer their own networks, is essential for improving network operation, management and defense, and reducing costs. Eliminating the plethora of providers will help erase the fragmentation that often impedes functionality and makes the user experience vary from location to location. It also will allow for more efficient application of limited financial resources and manpower.

The single provider concept is part and parcel of the Army's consolidation and standardization efforts. The move to a uniform underlying architecture, known as the common operating environment, is already under way. This published set of standards, to which the Network and all applications riding the Network must adhere, promotes the use of commercial off-the-shelf technology and brings the Army closer to a true plug-and-play environment. The Army also has standardized to a single mode of information transmission, regardless of format or delivery means. Whether simple text, voice, video, signal or other type of data, the Network will move it via a nonproprietary Internet protocol, a method dubbed EoIP (everything over Internet protocol).

The Army is centralizing and standardizing services as well. Using cloud technology and the Defense Depart-

LTG Susan S. Lawrence *is the Army Chief Information Officer/G-6. Throughout her career, she has served in operational assignments in Europe, Korea, Southwest Asia and the United States. She has commanded at every level from platoon to Army Signal Command. Most recently, LTG Lawrence served as commanding general for the U.S. Army Network Enterprise Technology Command/9th Signal Command, Fort Huachuca, Ariz. A graduate of Campbell University, N.C., the Army Command and General Staff College and the Army War College, she has a master's degree in information systems management from the University of Georgia.*

Innovation ... Delivered.

The Army's Individual Semi-Automatic Airbursting System (ISAAS), also known as the XM25

LW30mm M230 Chain Gun® Automatic Cannon

A BLACKHAWK! SERPA Holster

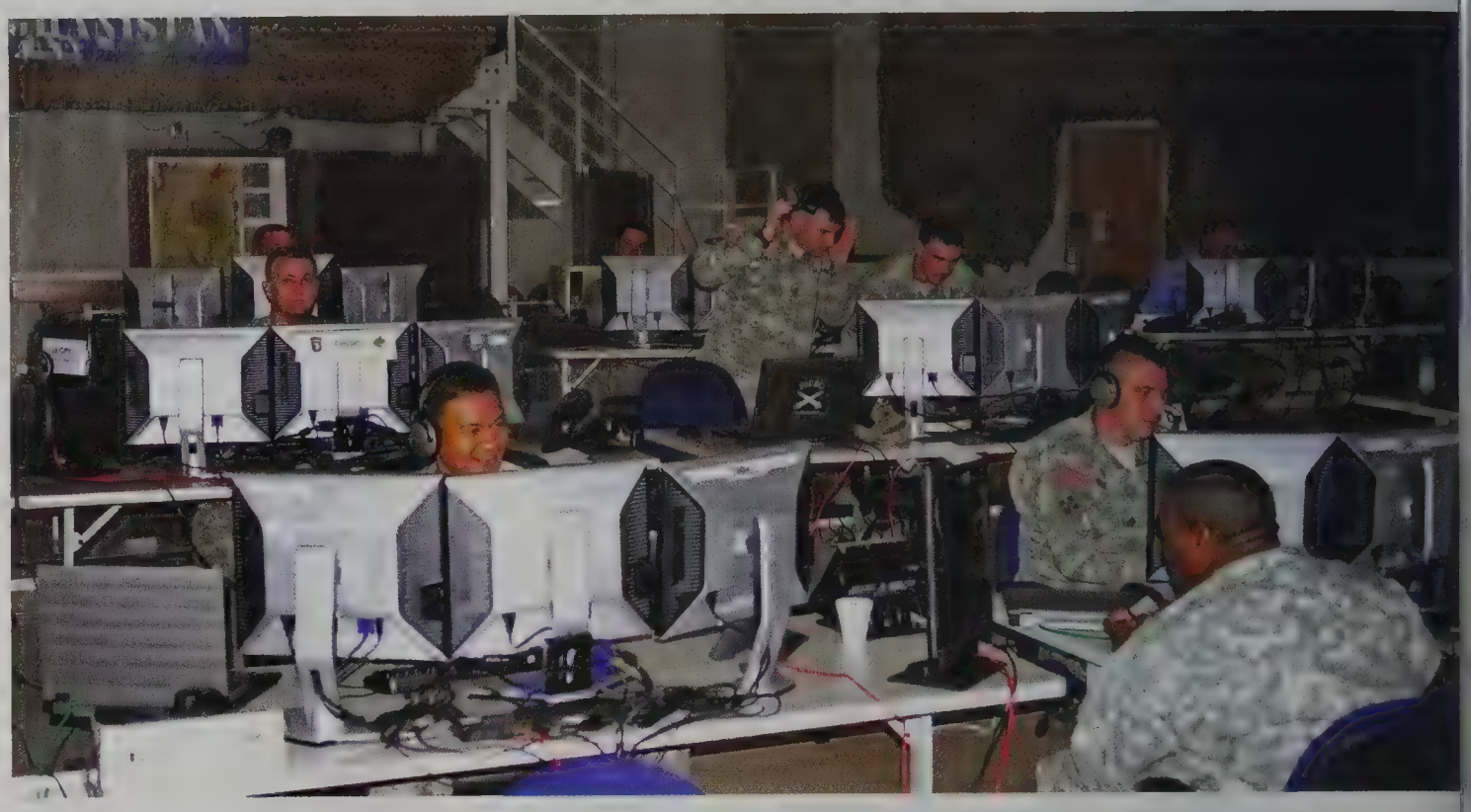
Precision Guidance for Artillery and Mortars

Our commitment is to America's Army – The Nation's Force of Decisive Action. This is ATK.

Visit Us at AUSA 2012
Booth #6817, Upper Floor Exhibit Space
ArmamentSystemsBDev@atk.com

www.atk.com

ATK®



Soldiers from Headquarters and Headquarters Battalion, 101st Airborne Division (Air Assault), at Fort Campbell, Ky., participate in the Army's Network Integration Evaluation (NIE) 12.2 exercise held at White Sands Missile Range in May. Army planners incorporated the role of higher headquarters into the NIE for the first time.

ment's joint information environment (JIE), the Army is providing email, collaboration tools, data and application hosting, and network defense (NetOps) from the enterprise level. In addition to improving availability and security, tapping cloud technology and the JIE will allow the Army to shrink its IT infrastructure footprint and redirect resources to enhancing other aspects of the Network.

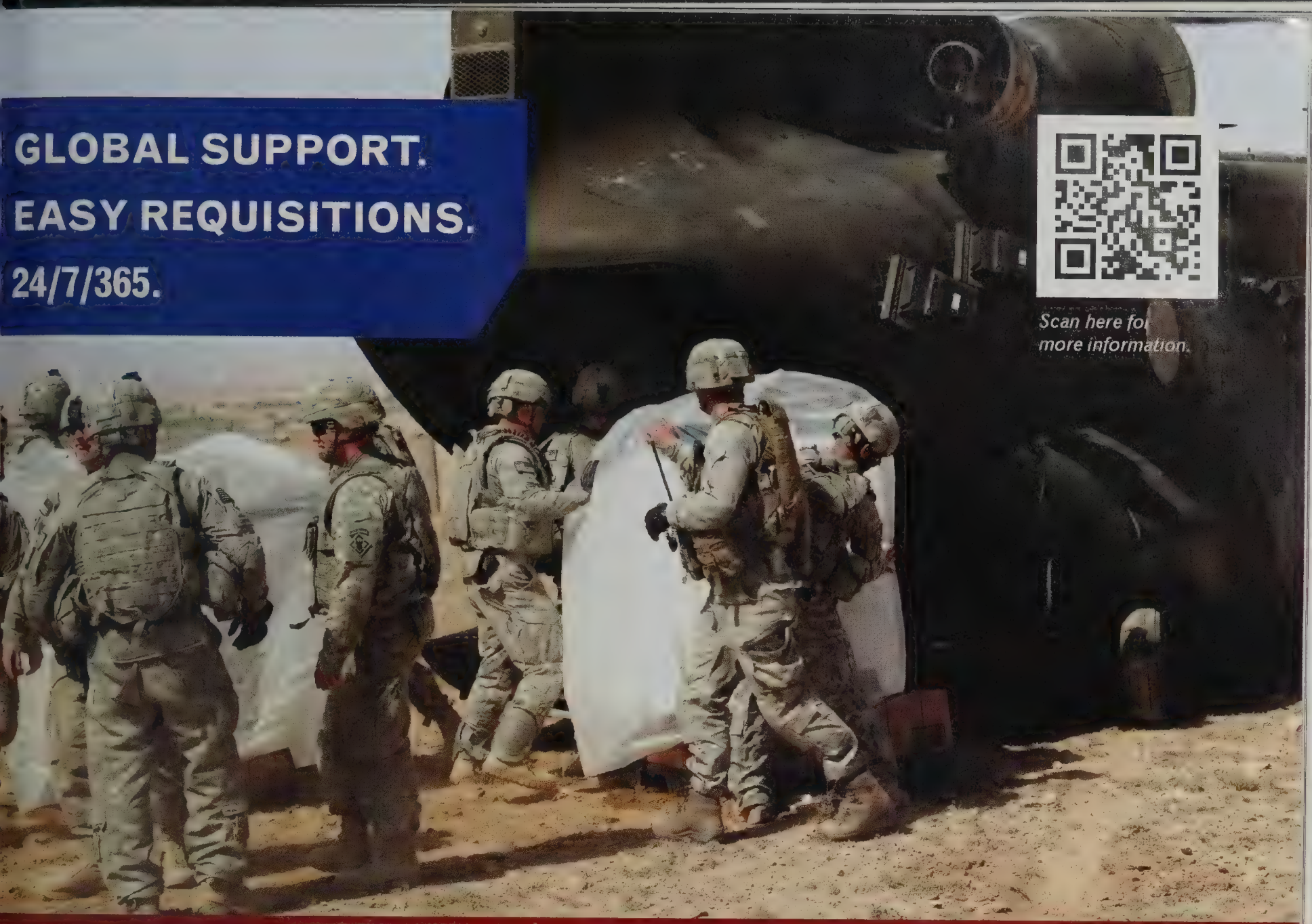
It's All About Capability

A unified, end-to-end network necessitates a different method of management—one that promotes timely, holistic modernization reflective of current, validated needs. Enter the Army's new capability portfolio review (CPR) process. If the Network is viewed as a whole rather than loosely associated components, the CPR will allow the Army to comprehensively align network capability development, acquisition and sustainment with warfighting and soldier priorities while staying within resource limits.

The Network CPR process is just beginning. Assessment of Army requirements will follow the capability categories delineated by the JIE: connect, access, share, operate and secure. In the near term, the CPR will focus on revitalizing and augmenting capability in the garrison. Over the past 10 years, most modernization efforts targeted the tactical, deployed force. As the Army returns to being a primarily continental U.S.-based expeditionary force, the soldier-user will expect the Network to provide support similar to what he experienced on the tactical side of the Network. The CPR will concentrate on building transport capacity, enhancing warfighting and business functionality, improving cyber security, and implementing network standards.

Treating the Network as a single capability portfolio will enable another significant change: providing installation services (such as email, identity management and thin client) and fielding installation equipment and infrastructure as a unified capability set in synchrony with Army Force Generation (ARFORGEN) priorities. The Army has already applied the concept, known as capability set man-

A 2nd Brigade Combat Team (BCT), 1st Armored Division soldier demonstrates a Nett Warrior device during NIE 12.1 last November. NIE produced valuable feedback on the latest tactical communications technologies, and the Army is moving closer to deploying an integrated battlefield network.



Whatever You Need, Wherever You Need It

Turn to GSA Global Supply™

We've provided military customers around the world with the resources needed to achieve their mission since 1949. As a wholesale supply source, fully integrated into the National Supply System, GSA Global Supply manages 70,000 National Stock Numbers (NSNs) and over 400,000 part numbers including tools, office supplies, safety gear and much more. You can place your easy requisition with GSA Global Supply via MILSTRIP or Government Purchase Card.

Because GSA's mission has always been to help you complete yours, GSA Global Supply has staff deployed worldwide to assist you from providing training to expediting the flow of needed supplies.

For more information, visit **www.GSAglobalsupply.gsa.gov** or call **1.800.525.8027**.

We Accept GSA SmartPay® 2

Our customer service hours have been extended! Status updates, billing, and information available 24/5 (Sunday, 9P ET – Friday, 9:30P ET) at **1.800.488.3111**

GSA

U.S. General Services Administration

Inside his vehicle, a soldier from 2nd BCT, 1st Armored Division, uses the new version of the Army's friendly force tracking and messaging software, Force XXI Battle Command Brigade and Below, called Joint Capabilities Release, which provides units with a faster satellite network and advanced mapping kits.

agement, to the tactical side of the Network; it is equally valid for the rest of the Network. By giving the user a complete, modernized suite instead of upgrading one element at a time, the Army will be able to maximize the functional impact of new technology and services. Keeping time with ARFORGEN will minimize the effects of technology introduction on readiness and simplify programming and budgeting. The Army will regularly review and, when needed, revamp the capability set. The result will be a continuously modernized network that meets today's—not yesterday's—requirements.

Better governance will also help to ensure that the Army has the right network capability. Employing a mission area framework, the Army will examine and manage requirements and policy by domain: warfighting, business and enterprise information environment. Using the mission area rubric will help to streamline IT governance and raise visibility of IT expenditures, producing better overall management of the portfolio.

To Protect and Defend

While very few adversaries can challenge the United States' superiority on the sea, in the air or even on land, cyberspace presents a persistent vulnerability. The Network is a target-rich environment that can be compromised with little capital investment by an actor half a world away, and the threat changes with the same incredible speed as today's ever-evolving information technology.

The first step toward improving cyber security is, again, standardization—this time, distributing Army-wide a uniform, cutting-edge and compatible suite of NetOps tools, tactics, techniques and procedures to monitor for and defend against attack. By expanding visibility of the Network and its status, and providing the capability to exert control over every device on the Network, the Army can lower the risk of attack and any potential harm when security is breached. Clearly defining command and control responsibilities for Network defense also is essential to solid prevention and swift remediation.

The Army is reducing the number of potential avenues for cyber attack as well. For example, identifying and upgrading legacy software across the operational force shuts one type of vulnerable back door. Migration to thin clients for the classified network and zero clients for the unclassified network closes another path. Thin-client devices use cloud computing to run part of an operating system and most or all applications from a central server; zero-client devices rely entirely on the cloud, running no operating system and controlling only the server connection and display. In the current LandWarNet architecture, 80 percent of network vulnerabilities are introduced at the end node. With no data storage capability at the user location, however, the damage caused by breach or loss of the device drops dramatically.

In addition, the Army has moved to DoD Enterprise Directory Services (EDS), a single point of management for network identities and access. Whereas many personnel previously had multiple email or network accounts depending on assignment and location, EDS provides one network identity for an entire career—eliminating the inefficiency, errors and risk inherent in maintaining multiple accounts for one individual. The impact of data center consolidation will be even broader. The Army intends to reduce the number of Army data centers by at least 75 percent, which in turn will dramatically lower the number of points of presence on—and possible entryways to—the Network.

The Network: An Indispensable Force Multiplier

What lies ahead for the Army and the nation? It's hard to predict, but as Secretary of Defense Leon E. Panetta wrote in January, "We are shaping a joint force for the future that will be smaller and leaner but will be agile, flexible, ready and technologically advanced. It will have cutting-edge capabilities, exploiting our technological, joint, and networked advantage." As the largest portion of that joint force, the Army must lead the way in creating that networked advantage. We are prepared and committed to providing the best network possible and giving the soldier, sailor, airman, marine and ally every tool he or she needs to achieve mission success. ★

Better ideas. Better innovations. And better implementation to suit the needs of those in the field. At HDT, world-class engineering leads to world-renowned products through a process that pairs the brightest minds in the business with

In the battle of brains vs. brawn, we opted to take both sides.

experts who've earned their stripes in the field. In the end, that means expeditionary systems and components that are as smart as they are strong. Just like the forces that rely on them to work flawlessly day after day.

MILITARY INDUSTRIAL COMMERCIAL CONTINGENCY OPERATIONS HOMELAND SECURITY

hdtglobal.com

The prevailing force in the field

HDT

42% mobility improvement

100% committed to mission success

Lower pressure results in a larger tire footprint – the right tire pressure at the touch of a button.

PROVEN PERFORMANCE. Military operations around the world rely on Dana's Spicer® Central Tire Inflation System (CTIS). This intelligent mobility system gives military vehicles the ability to keep rolling through difficult terrain, including sand, mud, soft soils, or steep grades. The engine, transmission, ABS, and axle differential locks can be integrated via data links for seamless drivetrain performance. For success on the ground, specify the rugged, low-maintenance Spicer CTIS. **To find out more, visit http://commercial.dana.com/CTIS.**

DANA SPICER®

Central Tire Inflation System (CTI

Army Equipment Modernization Programs For Today and Tomorrow

By LTG James O. Barclay III
Deputy Chief of Staff, G-8

The U.S. Army has faced periods of both war and postconflict transformation in its 237-year history. In the midst of the transition to an advise-and-assist role in Afghanistan, a strategic pivot to the Asia-Pacific region, and fiscal uncertainty, the Army is committed to avoid hollowing out its forces. Instead, the Army must maintain a vigilant, agile and ready force, poised to protect and defend our nation's interests.

The Army G-8 continues to empower and protect America's soldiers by providing them with the equipment they need when they need it. G-8 has partnered with agencies of Headquarters, Department of the Army, and with other services to apply a balanced, fiscally responsible approach to

Soldiers from 2nd Brigade, 1st Armored Division, stand before a Warfighter Information Network-Tactical Increment 2 Point of Presence platform in May during testing and evaluation at White Sands Missile Range, N.M.

equip the soldier. The Army aligns its equipment modernization communities to identify capability gaps and eliminate redundancies. Simultaneously, the Army prioritizes and incrementally modernizes the delivery of new and improved capabilities, ensuring equipment readiness through both the Army force generation process and the agile process.

The Army's new agile process is aimed at rapidly developing, acquiring and fielding integrated mission command capabilities and the challenge of matching requirements to fiscal reality, and it is succeeding. The Army has already achieved $6 billion in cost avoidance largely through restructuring programs to meet soldier needs. This process allows the Army to assess capability gaps, rapidly revise requirements, solicit mature industry solutions, and perform laboratory and field evaluations, shaving years off the traditional acquisition timeline. This incremental modernization allows the Army to use industry innovation and keep pace with technological advancements.

The Network Integration Evaluation (NIE) is an important enabler of the agile process. The NIE goal tests network and non-network systems through the hands-on participation of soldiers. They conduct combat-related operations in varying landscapes simulating the current threat environment. The NIEs are the means through which the soldier's voice is heard, ensuring the right solutions are delivered to the right soldiers at the right time.

* * *

The Army G-8 priority materiel programs for fiscal year (FY) 2013 include the network, combat vehicles, tactical wheeled vehicles and aviation.

The Network

The secure common joint-architecture network will provide encrypted, synchronized, on-the-move broadband voice, data and video capabilities. The network will deliver real-time situational awareness from corps and division combatant commanders down to squad-level soldiers.

The Warfighter Information Network-Tactical is the Army's tactical network that provides seamless, assured mobile communications for the soldier along with advanced network management tools to support implementation of the commander's intent and priorities, providing the broadband communications backbone. Upgrades to Increment 1 are under way. Increment 2 began fielding in FY 2012, providing an initial on-the-move capability as well as a robust line-of-sight transmission network and greater satellite throughput down to the company level.

The Joint Tactical Radio System (JTRS) is the Army's future deployable mobile communications family of radio systems, providing advanced joint tactical end-to-end data as well as voice communications to aircraft, ground platforms and dismounted troops. It is scheduled for a Milestone C decision in FY 2013. JTRS utilizes Internet protocol based technologies (the network) to provide routing capability and embedded information assurance, all while providing the added capability of simultaneous exchang

LTG James O. Barclay III *is the deputy chief of staff, G-8. He previously served as assistant to the deputy chief of staff, G-8 and, before that, as commanding general of the U.S. Army Aviation Center of Excellence and Fort Rucker, Ala. LTG Barclay has held numerous command positions including commander, Aviation Brigade, and later chief of staff, 4th Infantry Division (Mechanized), Fort Hood, Texas, and Operation Iraqi Freedom. He also served as director of the Joint Center for Operational Analysis, U.S. Joint Forces Command. Commissioned as a second lieutenant, Infantry, from the U.S. Military Academy in 1978, he has a master's degree in national security and strategic studies from the U.S. Naval War College.*

Paratroopers from 3rd Brigade Combat Team, 82nd Airborne Division, communicate with Joint Tactical Radio System (JTRS) radios during a field exercise at Fort Bragg, N.C., in March. The JTRS Rifleman Radio completed its operational test at the Army's Network Integration Evaluation 12.1 in November 2011.

of voice, data and video over multiple channels.

The Joint Battle Command-Platform (JBC-P) is the next generation of Force XXI Battle Command Brigade and Below/Blue Force Tracking and is the foundation for achieving information interoperability on current and future battlefields. The JBC-P will serve as the principal command and control/situational awareness (C2/SA) system for the Army and Marine Corps at the brigade level and below. The first contracts for low-rate initial production will be released in FY 2013.

The Distributed Common Ground System-Army (DCGS-A) provides commanders at all levels with access to the Defense Intelligence Information Enterprise through integrated intelligence, surveillance and reconnaissance processing as well as exploitation and dissemination of airborne and ground sensor platforms. DCGS-A uses the entire national, joint, tactical, and coalition intelligence, surveillance and reconnaissance (ISR) capability to meet the needs of the soldier. The Office of the Secretary of Defense Information Technology Acquisition Board full-deployment decision will be in FY 2013.

Nett Warrior is a mission command system, similar to a smartphone, worn by the dismounted soldier providing unprecedented C2/SA capabilities and support. Nett Warrior allows soldiers to upload and see each other's positions, mark improvised explosive devices and enemy positions, and communicate situational awareness to the combatant commander via the network's Tactical Ground Reporting System. The Nett Warrior Program of Record will submit a request for proposals to industry in FY 2013.

Combat Vehicles

The Army will continue to modernize its combat vehicle fleet to restore and maintain the capability to defeat current and future threats and will develop and field an integrated combined arms team, linked by the network, capable of dominating the enemy. Improvements include increasing protection, ensuring required mobility and allowing integration of the network.

The Ground Combat Vehicle (GCV) is the centerpiece of the Army's strategy for replacing the Bradley infantry fighting vehicle in armored brigade combat teams (ABCTs). The GCV provides protected mobility for the full nine-man infantry squad required to operate across the full spectrum of military operations. The Army expects to award engineering and manufacturing development contracts in FY 2014.

The Armored Multi-Purpose Vehicle replaces the M113 family of vehicles (FoV) and provides significantly improved protection and survivability with required mobility and network capability for the Army's critical enablers, such as mortars, medical evacuation and treatment, and

The Swedish CV-9035 is one of five vehicles assessed during the Army's Ground Combat Vehicle (GCV) Non-Developmental Vehicle Assessment effort at Fort Bliss, Texas, and White Sands Missile Range. The GCV will replace the Bradley infantry fighting vehicle in armored brigade combat teams.

The M109 Paladin Integrated Management is slated to begin low-rate initial production by 2013. The 40-ton, next-generation 155 mm Howitzer artillery cannon can fire precision rounds, accommodate additional armor protections and power more on-board electrical systems.

Mission Command vehicles. The initial focus is on replacing M113s within the ABCTs, with a future decision point to address the M113s located in echelons above brigade. The program is currently considering materiel decisions leading to Milestone A.

Paladin Integrated Management (PIM) is an important part of the Army's combat vehicle modernization strategy and provides readily available, low-risk upgrades to enhance the responsiveness, force protection, survivability and mobility of the self-propelled Howitzer fleet. PIM replaces the current M109A6 Paladin and M992A2 Field Artillery Ammunition Supply Vehicle chassis with a more robust platform, incorporating Bradley common drive train and suspension components in a newly designed hull. In the first quarter of FY 2013, the PIM program will continue developmental testing, conduct a limited user test as well as prepare for a Milestone C decision that fiscal year.

Tactical Wheeled Vehicles (TWV)

The TWV portfolio includes the light, medium and heavy tactical vehicle fleets and the mine resistant ambush protected (MRAP) FoVs. The Army employs TWVs in a wide variety of roles including logistics vehicles, materiel handling equipment, armored vehicle transports, ambulances and C2 vehicles.

The Joint Light Tactical Vehicle (JLTV) is the centerpiece o the Army's tactical wheeled vehicle modernization strateg and will replace approximately one half of the light wheele vehicle fleet by 2035. The multimission vehicle design pro vides protected, sustained and networked mobility for per sonnel and payloads across the full range of missions. Th joint services require enhanced performance and protectio that exceeds that of the current High Mobility Multipurpos Wheeled Vehicle. The Army released the request for propos als for potential JLTV vendors in January and expects Milestone B decision in the fourth quarter of this fiscal yea A Milestone C decision is expected in FY 2015.

Aviation

The Army's aviation program is continuing to procur the latest models of the OH-58, CH-47, AH-64, and UH-6 aircraft. The goal is to develop and field an integrate modular, multifunctional team that is linked by the ne work to dominate our enemies with the versatility c manned and unmanned platforms.

The Kiowa Warrior (KW) fulfills the continuing require ment for a light, armed helicopter for manned aerial recor naissance, surveillance and light attack operations. The cu rent KW OH-58 upgrade program provides enhance cockpit and sensor capabilities, including the Cockpit Dis play Subsystem 5, a nose-mounted sensor, a Dual-Channe Full Authority Digital Electronic Control engine, and inte grated manned/unmanned teaming capability. Improve ments for the KW helicopter include obsolescence an weight reduction efforts for the aging KW fleet. The Arm G-8 is resourcing long lead items for the first lot of limite rate initial production OH-58F. In FY 2013, the Army wi decide whether to pursue the Armed Aerial Scout or exten the life of the Kiowa Warrior.

* * *

While we are a force in transition during a period of de clining resources, the Army will continue to provide a ve satile, affordable mix of equipment, enhancing its ability t succeed in unified land operations and maintaining a dec sive advantage over any adversary. We will do this with a fordability as our watchword and remain committed stew ards of our nation's resources.

A current upgrade program provides enhanced cockpit and sensor capability to OH-58 Kiowa Warrior helicopters, like this one flying from Bagram Airfield, Afghanistan.

Cloud Cap Technology
TASE Gimbals
Piccolo Autopilots

Cloud Cap
TECHNOLOGY
UTC Aerospace Systems

Protecting our ground forces is our mission.

Cloud Cap Technology TASE Gimbals, the new standard in stabilized camera systems. The ideal solution for force protection and other ISR missions.

+1 541 387 2120
www.utas.utc.com
sales.cct@utas.utc.com
www.cloudcaptech.com

UTC Aerospace Systems

1BDT
BERETTA DEFENSE TECHNOLOGIES
Forged from more than 500 years of innovative heritage, a new Alliance brings our warfighters the most advanced and integrated weapon systems and services. Beretta Defense Technologies—Your First Line of Defense.
www.berettadefensetechnologies.com
Your First Line of Defense
BERETTA
Benelli
sako
STEINER
GERMANY

Together We Win: Demonstrating Inspired Leadership On Army Installations

By LTG Michael Ferriter
Assistant Chief of Staff for Installation Management
and
Commanding General, U.S. Army Installation Management Command

U.S. Army installations are vibrant communities that are sources of support, strength and connection for millions of people around the world—soldiers, families, Army civilians, retirees, and friends and neighbors in the surrounding communities. These installations are more than facilities, infrastructure and services; they are our home.

Every day at every installation, our garrison commanders work for the senior mission commander to integrate and synchronize all installation services and support. The members of the Installation Management team are proud to mark 10 years of dedicated service in 2012. On installations around the world, the Installation Management team fulfills its mission—providing soldiers, families and

The state-of-the-art Installation Management Command (IMCOM) Academy on the new IMCOM headquarters campus at Joint Base San Antonio, Texas, includes a student wing on the right and an administration wing on the left.

civilians with a quality of life commensurate with their service. Led by a workforce committed to world-class customer service, our installations are the foundation for providing that quality of life and fulfilling the Army's covenant with soldiers and their families. Serving customers—taking care of people—is what we do best.

During the past decade of conflict, the U.S. Army has maintained its edge as the foremost fighting force in the world, and our leadership has made it clear that as the Army resets, we will preserve our hard-won knowledge and capabilities while reintegrating our soldiers, resetting our equipment and training for future contingency operations. Just as important is promoting resiliency among our families and civilians, a vital tie in sustaining our all-volunteer force.

To these ends—retaining a combat-seasoned force, keeping faith with that force, and staying Army strong—the Army continues to invest in programs, services and infrastructure that support soldier and family readiness. In the upcoming years of transition and transformation, support from the Army's Installation Management team remains as critical as ever.

This will be our boldest year to date, and our people are essential. We are transforming every aspect of workforce development—from the training delivered at the Installation Management Academy to placement through the Talent Management Center—to field the strongest team ever. Together with our mission partners, community partners, industry and academia, the Installation Management team continues to improve support for those who serve our nation and to transform to meet the needs of the Army of 2020.

LTG Michael Ferriter *is the assistant chief of staff for Installation Management and commanding general, U.S. Army Installation Management Command. Previously he served as deputy commander for advising and training, U.S. Forces-Iraq. He also served as commanding general, U.S. Army Infantry Center and the Maneuver Center of Excellence at Fort Benning, Ga.; deputy commanding general (Operations), XVIII Airborne Corps and Fort Bragg, Fort Bragg, N.C.; deputy commanding general (Operations), Multi-National Corps-Iraq; and director for operations, J-3, U.S. Joint Forces Command, Norfolk, Va. LTG Ferriter holds a bachelor's degree in business administration from The Citadel and a master's degree in administration from Central Michigan University.*

Reinforcing Programs and Services For a Resilient Force

Installation Management Command (IMCOM) is the face of the Army's commitment to soldiers and families. Our standardized services, facilities and infrastructure serve America's Army on more than 70 installations around the globe, providing range operations support, housing, emergency services, child care, youth programs, sports and recreation, religious support, environmental and safety programs, education, employment programs and much more.

Soldier and family programs target a range of critical needs, focusing on enhancing soldier, family and civilian resiliency through programs like substance abuse and suicide prevention, support for exceptional family members, sponsorship for relocating personnel, single soldier activities, and financial employment and deployment readiness. These programs embody the Army's proactive approach to promoting health, preventing high-risk behaviors and building resilience in mind, body and spirit.

Our Survivor Outreach Services enable the Army to keep faith with those who have made the greatest sacrifices. This program delivers customized and integrated services for those making life-changing decisions at a challenging time.

Similarly, our Warrior in Transition campuses, which include barracks, wounded warrior administration buildings and soldier and family support centers, colocate our recovering soldiers and their support networks, all in close proximity to medical facilities. This integration supports our wounded warriors' healing process.

With this strong foundation of programs and services, IMCOM's focus is to continue to connect soldiers and families with the resources available to them. We have enhanced the Total Army Sponsorship Program, ensuring the connection is made among unit leadership, sponsors and relocating personnel. Model programs such as the one at Fort Hood, Texas, demonstrate that garrison staffs fully support sponsorship as a commander's tool. Sponsorship gets soldiers and their families off to a great start. The sponsor helps a soldier integrate smoothly into the new unit, assists families in settling in the new community and connects them with important providers, such as Child, Youth and School Services and the Exceptional Family Member Program. Commanders recognize that a warm welcome for newly arrived soldiers and their families can have a tremendous impact on readiness and resilience.

The new $62-million Warrior Transition Brigade Complex, a 15-acre campus on Fort Hood, Texas, improves care for wounded, injured and ill soldiers and their families because services are centrally located and within walking distance.

Some of the biggest changes soldiers and families will see are in transition services. More than 130,000 soldiers separated or retired from the Army in fiscal year 2011, a number projected to increase as the Army reduces its end strength. As part of a responsible drawdown, the Army is committed to preparing soldiers to succeed in their transition to civilian life, and this year we are doing more than ever in this area.

Responding to the Veterans Opportunity to Work to Hire Heroes Act and a subsequent Army execution order, the Army Career and Alumni Program (ACAP), the Army Community Service and the Army Continuing Education System are working with the U.S. Department of Labor and Department of Veterans Affairs to implement a holistic and integrated transition program, beginning in November. The enhanced program increases soldiers' preparation time to 12 months before they separate and has them work towards concrete outcomes—a job offer, acceptance to a school or a business plan—with leaders engaged throughout the process.

Fort Benning, Ga., CSM Chris Hardy takes notes during the Army Career and Alumni Program's three-day Transition Assistance workshop in the headquarters building, home of the Maneuver Center of Excellence, in April. CSM Hardy retired from the service in June.

Building strong partnerships throughout America is one of the most important things we do to connect soldiers and families with resources. We see that with ACAP. In conjunction with partners in private industry and at every level of government, ACAP connects soldiers with employment opportunities. In addition to offering 24/7 support through a call center and online, ACAP is linking capabilities to help soldiers virtually attend job fairs.

Communities across the nation are eager to support soldiers and families. More than 800 communities have signed Army "community covenants," giving soldiers and families even more resources. Similarly, in working with national efforts, like Joining Forces, Military Spouse Employment Partnership, and the Interstate Compact on Educational Opportunity for Military Children, we are helping

The Villages at Fort Irwin, Calif., are part of the Residential Communities Initiative, which aims to eliminate inadequate housing within California's military communities. Fort Irwin has been undergoing renovation and construction since 2004 and has more than 700 new houses and a 25,000-square-foot community center.

families connect with educational and employment resources.

Optimizing Infrastructure For a Ready Force

Our installations are platforms of readiness, with housing and barracks, ranges, and all the other facilities that support training and quality of life for soldiers and families. In support of Army Facility Strategy 2020, we are synchronizing military construction and sustainment, restoration and modernization projects on our installations with a recently revised Army Facility Investment Strategy, which focuses on disposing of excess and sustaining and improving existing facilities before building new ones. By ensuring that funding is directed toward overall Army objectives, we will be able to meet mission requirements at lower costs now and in the future.

Managing the installations where we live, work and train requires judicious application of resources. IMCOM will maintain long-term capacity to care for soldiers and families and support senior commanders by operating sustainable installations. A number of IMCOM installations are pilot sites for the Army's Net Zero initiative, focused on developing models for producing as much energy as is consumed, limiting the use of freshwater resources, and eliminating solid waste to landfills by 2020. Now, across all of our installations, sustainment, restoration and modernization projects include a range of energy- and water-saving technologies in existing facilities, among them: energy and water management control systems; motion sensors; upgraded heating, ventilation and air conditioning; weather-sensitive irrigation systems; and xeriscaping. Similarly, our Residential Communities Initiative (RCI) partners are incorporating sustainable features in family housing units at all our RCI sites.

We rely on civilian partners outside our gates to accomplish some of our most ambitious projects. By taking advantage of alternative contracting mechanisms, we can engage public and private partners in applying new technologies without installations having to bear large upfront costs. These partnerships have made a wide range of projects possible, including net zero energy housing at Fort Campbell, Ky.; a methane gas project at Fort Knox, Ky.; a water desalination plant at Fort Bliss, Texas; and, one of the latest, the Army's largest solar array, currently under construction at White Sands Missile Range, N.M. Installations are working to incorporate these kinds of projects into strategic sustainability plans that balance benefits and costs across our operations.

Aligning Solutions for an Agile Force

As the Army adapts to a shifting defense posture, senior commanders need forces that are ready and quickly deployable, and soldiers and families want predictable programs and services. To align both sets of expectations within current and projected funding levels, we are taking a standardized approach that can be tailored to local circumstances. The Common Levels of Support strategy makes this approach possible by standardizing delivery within available funds, providing commanders with the performance measures and flexibility they need to tailor delivery and providing soldiers and families with predictability.

All of the support that IMCOM delivers relies on partnerships to sustain a solid foundation of programs, services and infrastructure. We benefit from developing a shared understanding of issues with the Army staff, Army commands, Army service component commands and senior commanders. During collaborative forums with our stakeholders, we discuss challenges, identify requirements from different perspectives, sort out relationships, and define our roles and responsibilities. By partnering with other government agencies, academia, nonprofit organizations and corporations, we expand our reach and harness the expertise and best practices of others. In doing so we discover interdisciplinary solutions that make us better able to face an unpredictable future.

This unity of purpose and effort greatly enhances and magnifies IMCOM's ability to effect change. Working with strong, engaged partners enables us to make best use of resources and deliver best value, as we put into action the Army's commitments to soldiers and families. We are proud to serve our soldiers and families and are committed to sustaining the support that keeps our force Army strong. ★

We were there when you landed on the northern coast of France.
We were there when you returned to the Philippine shore.
We were there when you fought in Korea and Vietnam.
We were there when you rolled across the deserts of Iraq.
We were there then. We will always be there.

Serving the insurance needs of the Military since 1936.

GEICO®
geico.com

1-800-MILITARY (1-800-645-4827)
or your local GEICO office.

AUTO ★ HOME ★ RENTERS
MOTORCYCLE ★ BOAT

Some discounts, coverages, payment plans, and features are not available in all states or in all GEICO companies. Homeowners, renters, and boat coverages are written through non-affiliated insurance companies and are secured through the GEICO Insurance Agency Inc. Motorcycle coverage is underwritten by GEICO Indemnity Company. GEICO is a registered service mark of Government Employees Insurance Company, Washington, D.C. 20076; a Berkshire Hathaway Inc. subsidiary. © 2011 GEICO

Under the patronage of [illegible]
President of the UAE & [illegible]

17-21 February 2013
ADNEC, Abu Dhabi, United Arab Emirates

IDEX 2013
ايدكس

LAND

SEA

AIR

DEFENCE TECHNOLOGY FOR THE FUTURE.

The Middle East and North Africa's largest defence and security exhibition returns to Abu Dhabi in February 2013. Where the global defence industry will meet influential VIP's, decision makers, military personnel and key investors at IDEX 2013.

To book an exhibition stand or outside space email info@idexuae.ae

For detailed information about IDEX 2013 visit www.idexuae.ae

Headline Sponsor: TAWAZUN تـــــوازن

Organised by: ADNEC

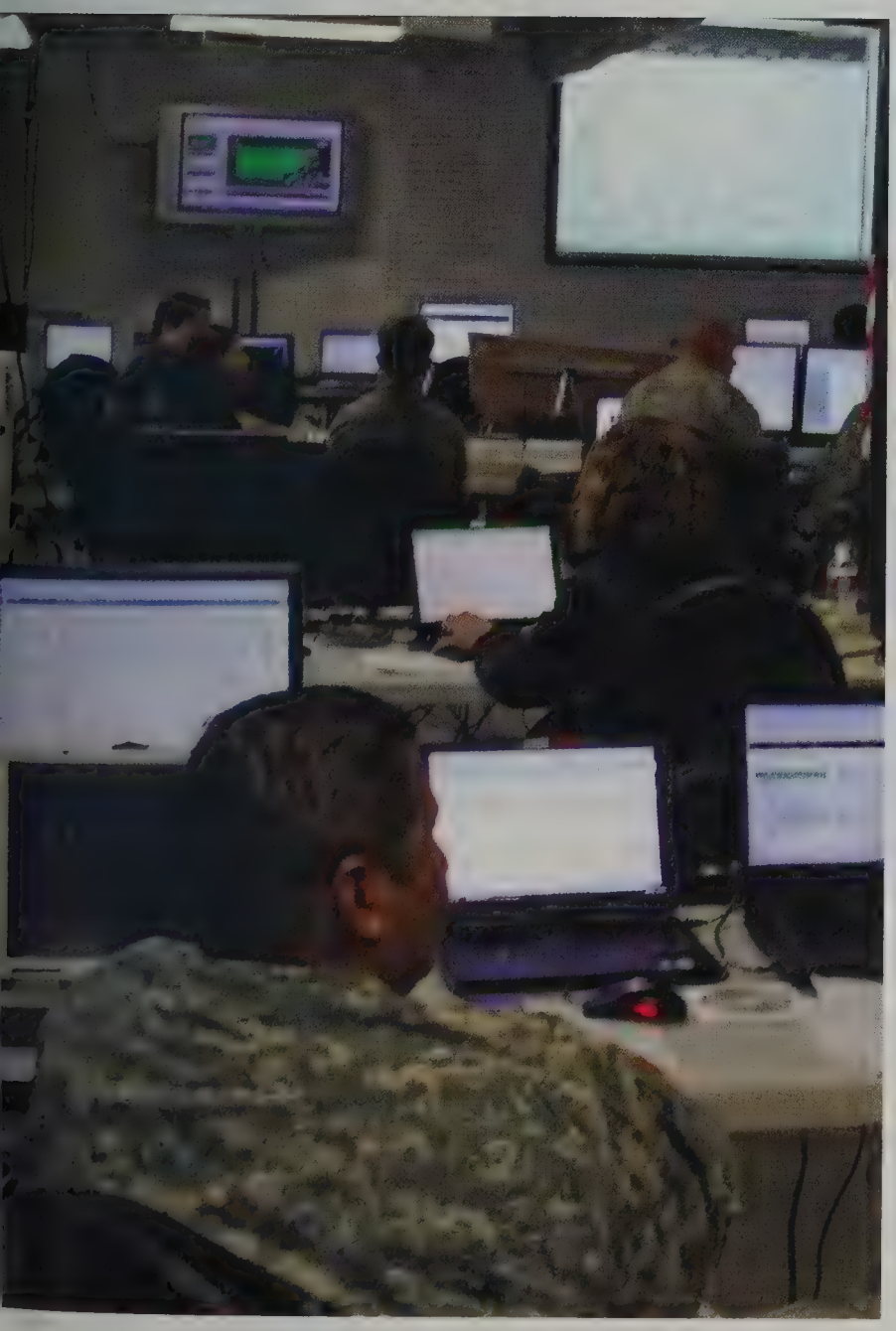
In association with: UAE Armed Forces

Co-located with: NAVDEX NAVAL DEFENCE EXHIBITION 2013

U.S. Army Cyber Command: Cyberspace for America's Force Of Decisive Action

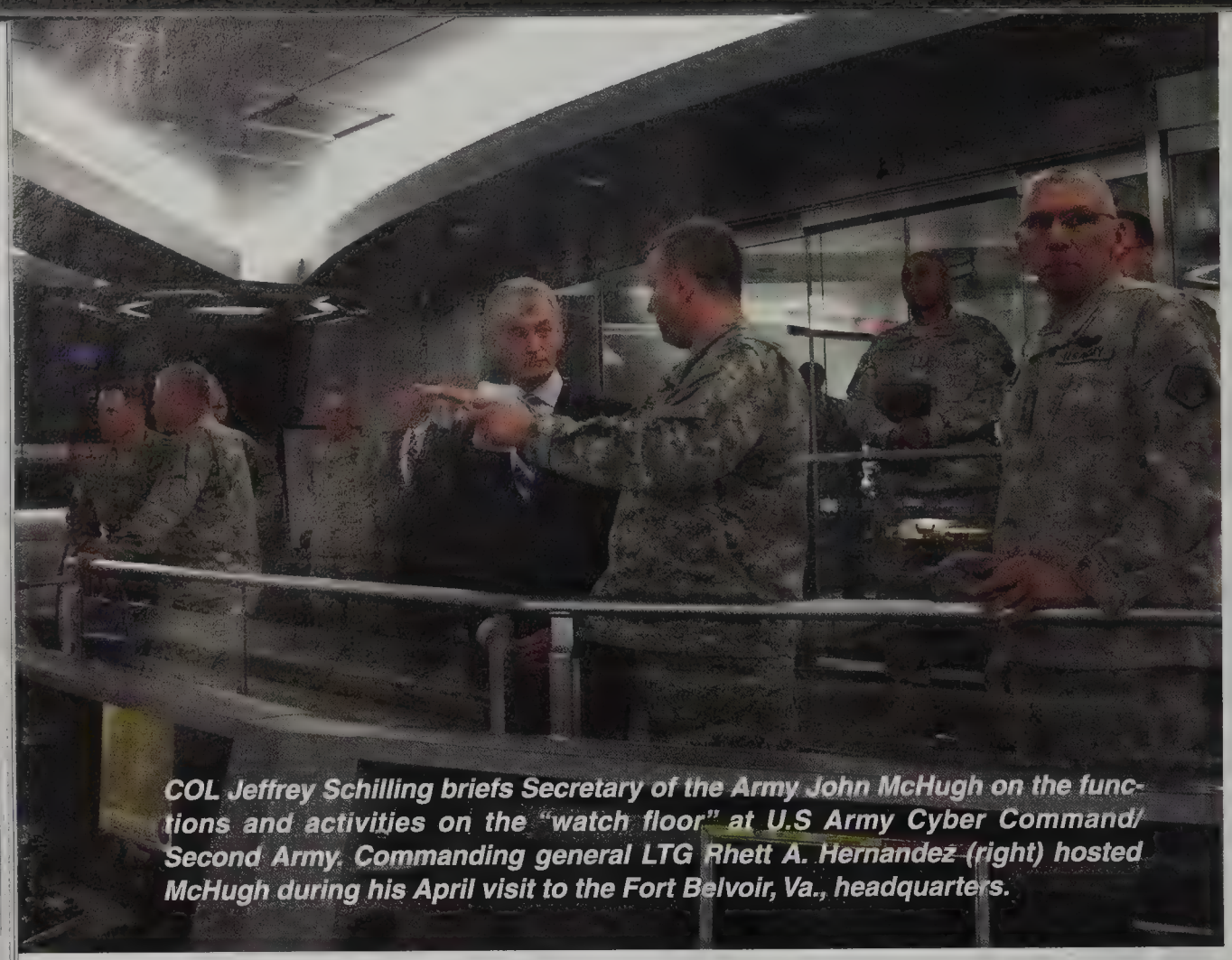
By LTG Rhett A. Hernandez
Commanding General,
U.S. Army Cyber Command

October marks the second anniversary of the Army's newest operational level Army force, U.S. Army Cyber Command/Second Army. Since its inception, Army Cyber Command has been leading the effort to secure and defend Army networks from hacktivists, cyber criminals, nation states, terrorists, mischief makers and insiders with malicious intent, who seek to take advantage of the Army's reliance on networked information systems. Maintaining the freedom to operate in cyberspace is critical to Army operations today and will be even more important to the Army's ability to fight and win the nation's wars tomorrow.



Operationalizing Cyberspace

Throughout our first year as an operational command, Army Cyber Command forged relationships and a



COL Jeffrey Schilling briefs Secretary of the Army John McHugh on the functions and activities on the "watch floor" at U.S Army Cyber Command/ Second Army. Commanding general LTG Rhett A. Hernandez (right) hosted McHugh during his April visit to the Fort Belvoir, Va., headquarters.

high level of integration with U.S. Cyber Command (USCYBERCOM) and the other service cyber components to enhance the security and protection of Army and DoD networks for the nation.

A milestone for the joint cyber team occurred on December 1, 2011, when the Army stood up its first dedicated cyber brigade at Fort Meade, Md. The 780th Military Intelligence Brigade (Cyber) supports USCYBERCOM and the combatant commands' operations and provides dedicated cyberspace and intelligence support to Army Cyber Command. The 780th "Cyber Brigade" joins more than 21,000 soldiers and civilians worldwide who execute Army cyberspace and information operations globally.

During its second year, Army Cyber Command concentrated its efforts on operationalizing cyberspace and improving the Army's capabilities to achieve military objectives in or through cyberspace. We established the command's mission essential tasks and readiness reporting system list and are building the Army network as a warfighting platform linked to a global cyberspace mission command structure of cyber-centers and cyber-staff elements.

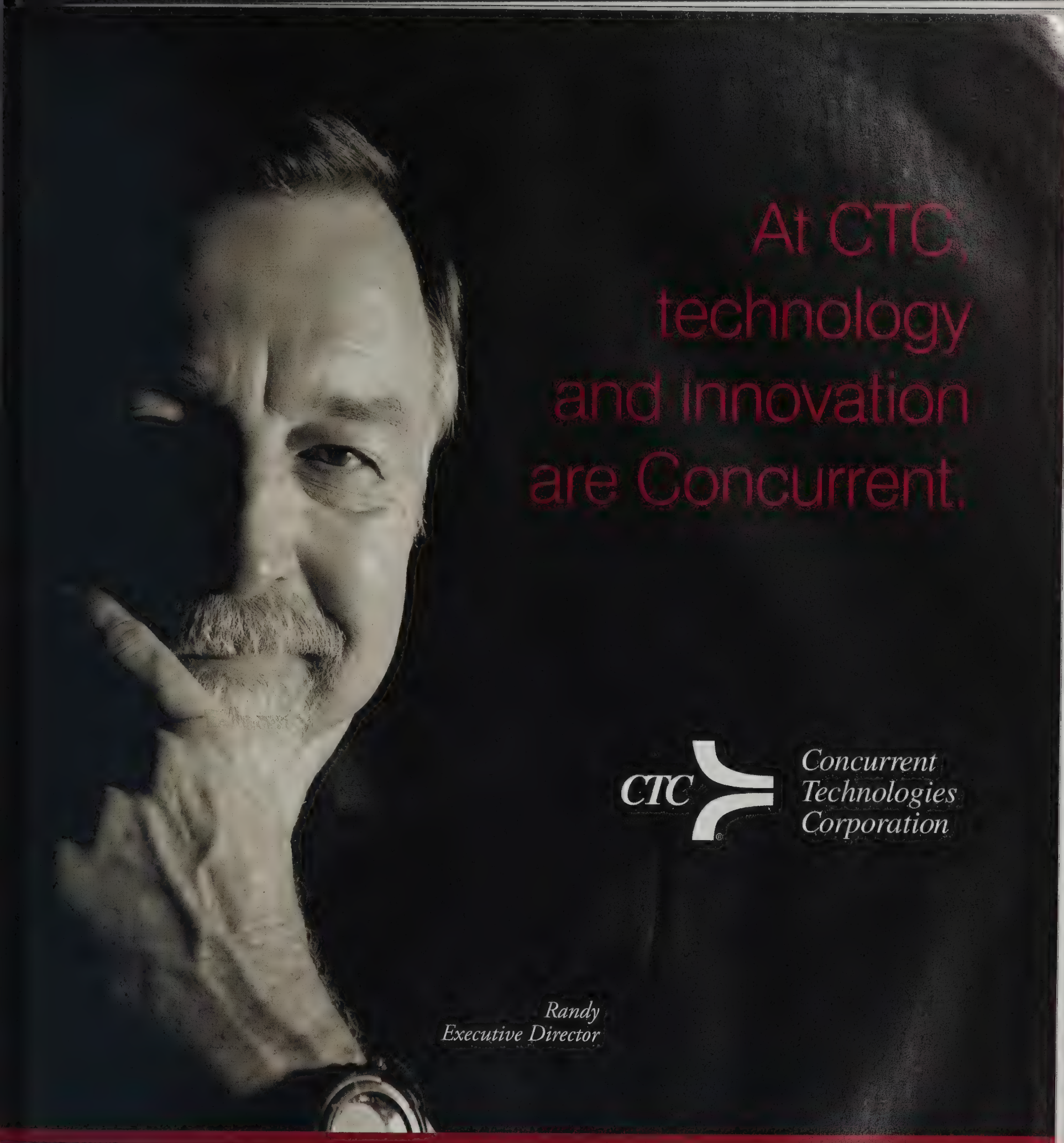
***LTG Rhett A. Hernandez** is the commanding general of the U.S. Army Cyber Command/Second Army. He was commissioned as a second lieutenant of Artillery from the U.S. Military Academy in 1976. Among other assignments, he has served as the assistant division commander (Support), 1st Armored Division, U.S. Army Europe and Seventh Army, Germany, and Operation Iraqi Freedom; and the commanding general, U.S. Army Human Resources Command, Alexandria, Va. LTG Hernandez holds a master's degree in systems engineering from the University of Virginia and in national security and strategic studies from the National War College.*

In our mission to secure and defend Army networks, Army Cyber Command blocked 400,000 individual Internet protocol addresses attempting to gain unauthorized access to Army networks, more than 4,000 known bad websites and more than 400 email phishing campaigns from reaching Army computers. In addition, we improved the security of the Army Knowledge Online (AKO) website and our Web Risk Assessment Team scanned more than 10,000 documents for cyberspace threats on Army web pages. We switched more than 330,000 Army email accounts to the Enterprise Email system and reduced the number of cross-domain violations by 50 percent. The command also continued to implement the Host Based Security System on Army computers to better protect our networks.

Incorporating realistic cyberspace scenarios into major exercises remains a focus. We brought a new level of cyberspace operational play to 13 major joint/combined exercises, including Austere Challenge in Europe and Terminal Fury in the Pacific. In addition, the command provided expeditionary cyber support element and observer-controller support to warfighter exercises. Critical observations made during these exercises are helping develop cyberspace training to challenge and teach Army forces to work in and through a disrupted and degraded cyberspace environment.

Army Cyber Command is heavily engaged in operational planning and theater-security cooperation, supporting development of combatant command and Army service component command plans worldwide. Building partner capacity is essential to the collective security of our nation and our allies. This year we published our theater security cooperation strategy, which is focused on building partner capacity and enabling stability and security in the future cyber environment. We are building robust relationships with allies and partners to strengthen collective cyber security. The command has developed a growing cadre of planners and analysts who provide cyberspace operations planning and targeting support to combatant commanders and joint task forces to accomplish operational cyberspace effects.

We are working to embed cyberspace and information capabilities into all contingency and crisis action plans. Emerging Army, joint and regional operational needs will help determine Army Cyber Command's future organizational structure. Future concepts provide for having trained cyberspace and information forces for all contingency and crisis action operations beneath joint task forces and Army units. In addition, we have focused on integrating cyberspace operations into operational plans and into planning for critical infrastructure protection.



We invite you to contact us and tell us how we can help you achieve your mission.

Our website offers information on our many services and career opportunities.

www.ctc.com
1-800-282-4392

2012 WORLD'S MOST ETHICAL COMPANIES
WWW.ETHISPHERE.COM

CTC is an Equal Opportunity Employer.

LTG Hernandez testifies before the House Armed Services Committee Subcommittee on Emerging Threats and Capabilities in July. Army Cyber Command has led the effort to secure and defend Army networks since its inception.

Building for the Future

To meet the challenges of the future strategic environment, the Army must fundamentally transform. The Army Cyber Proponent Office is developing the land cyber vision, which applies unified force under a single commander to achieve desired effects. To prevent, shape and win any conflict in the future, the Army will need to achieve three critical thresholds for cyberspace:

- A full range of cyberspace capabilities must be integral in all Army operations with cyber warriors integrated into cyberspace organizations and unit staffs. This is required in an environment where cyberspace operations are routine and pervasive. Army cyber units will be nested within joint global, expeditionary cyber constructs at every echelon to synchronize and deliver commanders' effects.
- Maintain cyberspace operational freedom in order to seize, retain and exploit the initiative, achieving the same level of freedom to operate in cyberspace that Army forces achieve on land.
- Move beyond enabling Mission Command to ensuring it despite any cyber threats. This will require integration of cyberspace operations and activities—including information operations, the cyber-electromagnetic spectrum and space—into the warfighting functions and across domains.

To forecast and prepare for tomorrow's cyberspace threats, Army Cyber Command is defining the doctrine, organization, training, materiel, leadership and education, personnel and facilities requirements and investments needed to defend an Army-wide enterprise network and harness cyberspace capabilities. Shared situational awareness and a common operational picture are critical to our ability to operate and defend networks and conduct cyberspace operations.

Training and Leadership Development

Fully operationalizing cyberspace throughout the Army requires developing leaders and soldiers who are able to operate in land and cyberspace. Education, training and leader development are critical. We're engaging Army leaders and elements to institutionally increase understanding of cyberspace and challenging the notion that cyberspace operations merely involve information technology and are only about defending networks. Commanders must not only understand the threats to their network, the operational impacts of these threats and their mitigation strategies, but they must also be able to articulate the cyberspace capabilities needed to support their objectives.

To address critical gaps in cyberspace capability requirements, our proponent directorate has identified specific capabilities required at corps, division, and brigade combat team (BCT) levels and proposed options to meet tactical requirements. The proponent directorate is also working to assess the knowledge, skills and abilities required by cyber space professionals to determine future requirements.

To prepare commanders and units for the cyberspace challenges ahead, Army Cyber Command developed and implemented the World Class Cyber Opposing Force (WCCOF) capability. Skilled at replicating the threats that units will face in cyberspace, the WCCOF is supporting National Training Center rotations. This will better prepare and train tactical BCT commanders and staffs for cyber operations against their tactical formations. Integrating this cyberspace opposing force capability into combat training centers is critical to training and leader development and ensures we maintain our freedom to operate in a degraded network environment and increase our ability to operate there as well.

To benefit from the best minds in the cyberspace arena, Army Cyber Command has formed a constellation of partnerships throughout the academic, business and government research communities to collaborate and share knowledge. We're partnering with the Massachusetts Institute of Technology's Lincoln Laboratory, the U.S. Military Academy's Cyber Research Center, the Defense Advanced Research Projects Agency, Georgia Institute of Technology, the U.S. Army Research Laboratory, Syracuse University, Sandia National Laboratories, Symantec, McAfee and others to ensure we have access to the capabilities and technologies the Army needs now and in the future.

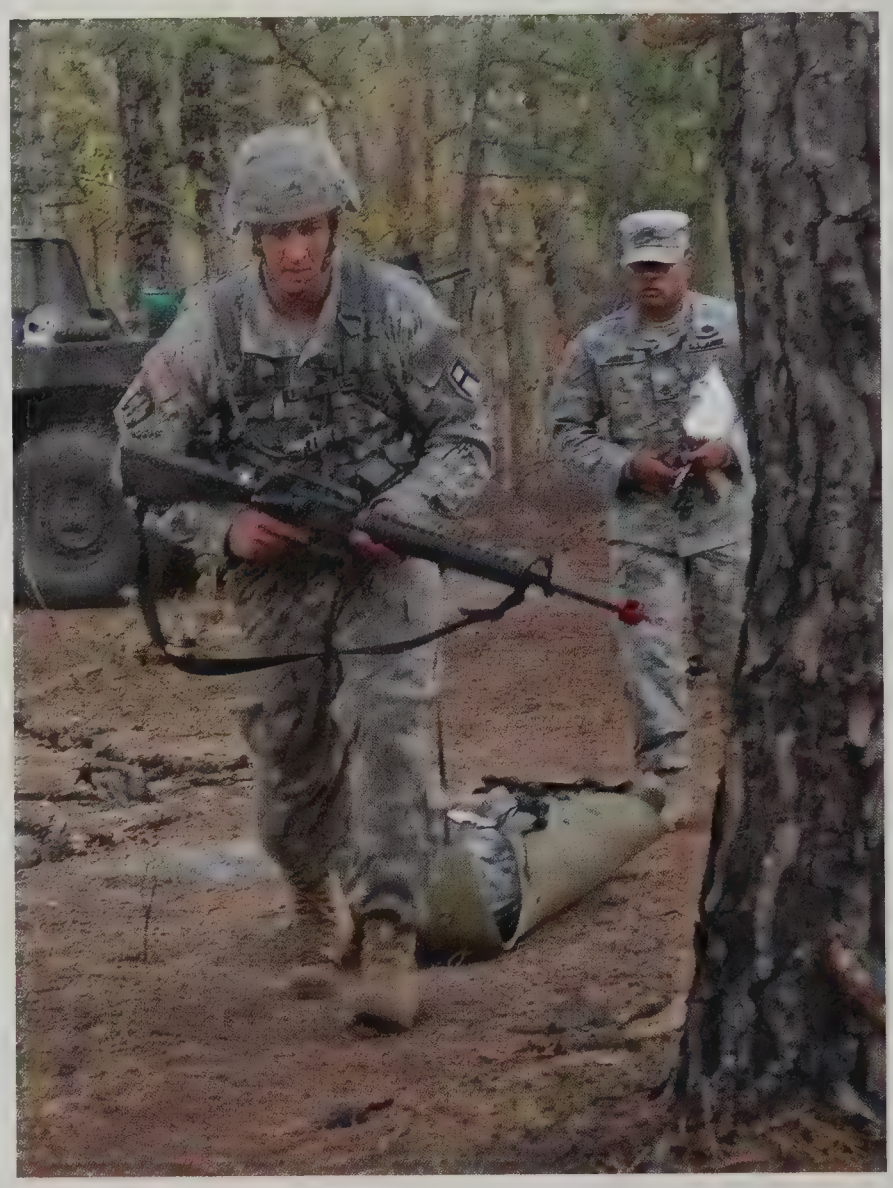
For a command built around technology, it's critical to understand that people are our most valuable asset. Cyberspace operations require a world-class cyber warrior force able to operate effectively today and in the future. Developing a robust cadre of cyber warriors is a top priority. Army Cyber Command is building this professional team of elite, trusted, precise, disciplined warriors defending networks, providing dominant effects in and through cyberspace, enabling mission command, and ensuring a decisive global advantage. We will provide depth and versatility in cyberspace to the joint force, and with our cyberspace capability we will provide options and flexibility for commanders and national decision makers to ensure that the Army remains America's force of decisive action. Second to none!

First Army

Training for Today's Requirements And Tomorrow's Contingencies

By LTG J. Michael Bednarek
Commanding General, First Army

The withdrawal of forces from Iraq and the ongoing reduction of forces in Afghanistan create a changing environment for our nation's Army. Force reductions, structure reviews and funding uncertainties coupled with unidentified future complex operational environments make it clear why our Army has refined its vision. By the end of fiscal year (FY) 2014, the majority of our units will no longer be deploying for combat operations. More than a decade of sustained land combat, underscored by frequent deployments, have transformed our nation's reserve component (RC) force from a strategic to an operational reserve. Today's RC force represents more than 51 percent of our total Army and is a full partner and critical element of the Army's ability to meet the National Military Strategy.



SGT Peter King, 174th Infantry Brigade, First Army Division East, trudges forward with a patient on a SKED, or military improvised litter, during the Northern Regional Medical Command's Expert Field Medical Badge competition held at Joint Base (JB) McGuire-Dix-Lakehurst, N.J.

The most significant future challenge for our operational reserve force is sustaining America's investment in manning, equipping and training. This is critical to provide future combatant commanders with trained, competent and adaptive units capable of operating in complex environments across the full range of military operations.

First Army provides training support to our nation's reserve forces to build and sustain operational readiness by maximizing enterprise partnerships and focusing on mission flexibility, unit adaptability and fiscal efficiency.

LTG J. Michael Bednarek *assumed command of First Army, Rock Island, Ill., in April 2011. LTG Bednarek has served in a range of command and staff positions in the United States, Europe and the Pacific. More recently, he served as commander, Operations Group, Joint Readiness Training Center, Fort Polk, La.; deputy commanding general (operations), 25th Infantry Division, Hawaii, in support of Operation Iraqi Freedom; commander, 25th Infantry Division; and commander, First Army Division-East. A graduate of the Command and General Staff College and the U.S. Army War College, he also has a master's degree in personnel management.*

Training Support, Mobilization and Demobilization

During FY 2012, First Army mobilized, trained, validated and deployed more than 52,000 personnel in support of worldwide operations. In addition to support for operations in Afghanistan and other enduring missions around the globe, First Army provided training support for three unique homeland defense and security missions.

First Army trained and validated RC units employed in support of the National Capital Region-Integrated Air Defense and Deployable-Integrated Air Defense System mission. These forces are trained to protect critical national assets and to respond to national special security events (NSSE) on a nationwide basis.

First Army increased its level of training to the Defense Support of Civil Authorities mission by sustaining our partnership with U.S. Army North (Fifth Army) and forging a new relationship with Joint Task Force-Civil Support (JTF-CS). First Army trainer/mentors (T/Ms) supported JTF-CS during the planning and execution of the Sudden Response exercise that focused on the Mission Command aspect of support in response to a potential domestic chemical, biological, radiological, nuclear event.

Recurring training support for Northern Command's Vibrant Response exercise's culminating training event before assuming the mission as the biological, radiological and nuclear enterprise response force remains a priority mission set. Trainer/mentors from across First Army deployed to Camp Atterbury, Ind., to train and evaluate Mission Command operations at the brigade and battalion task force levels for this important homeland defense requirement.

Security Force Assistance Team Deployment

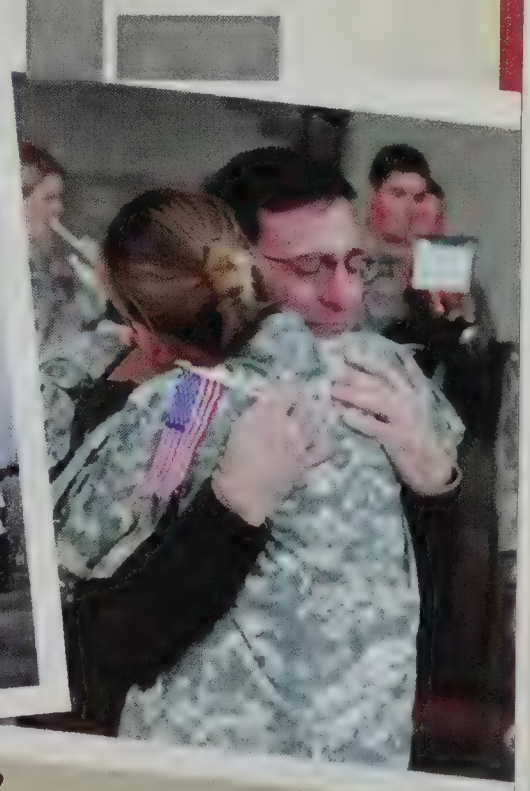
Security force assistance teams (SFAT) are an essential component in ongoing efforts to improve Afghan National Security Force (ANSF) capabilities and develop their ability to assume more responsibility for their internal security. The work the SFAT teams perform to develop the capabilities of the ANSF is one criterion of the overall U.S. military mission in Afghanistan.

First Army participated in this critical wartime mission along with our Army's active component divisions, by providing 14 teams of senior officers and senior noncommissioned officers during FY 2012 who train, mentor, and assist Afghan army and police units as they conduct security operations. This is a unique mission for First Army T/Ms—one they are well suited to perform.

First Army is currently training and preparing 560 Army National Guard soldiers from Hawaii's 29th Infantry Brigade Combat Team (IBCT) and Texas' 56th IBCT for a FY 2013 SFAT mission in Regional Command-South (RC S). These two National Guard brigades will deploy a total of 47 SFATs who will train ANSF at levels ranging from regional coordination to the district uniform police level.

Our Army's future security force assistance brigade con

WE ALL SERVE



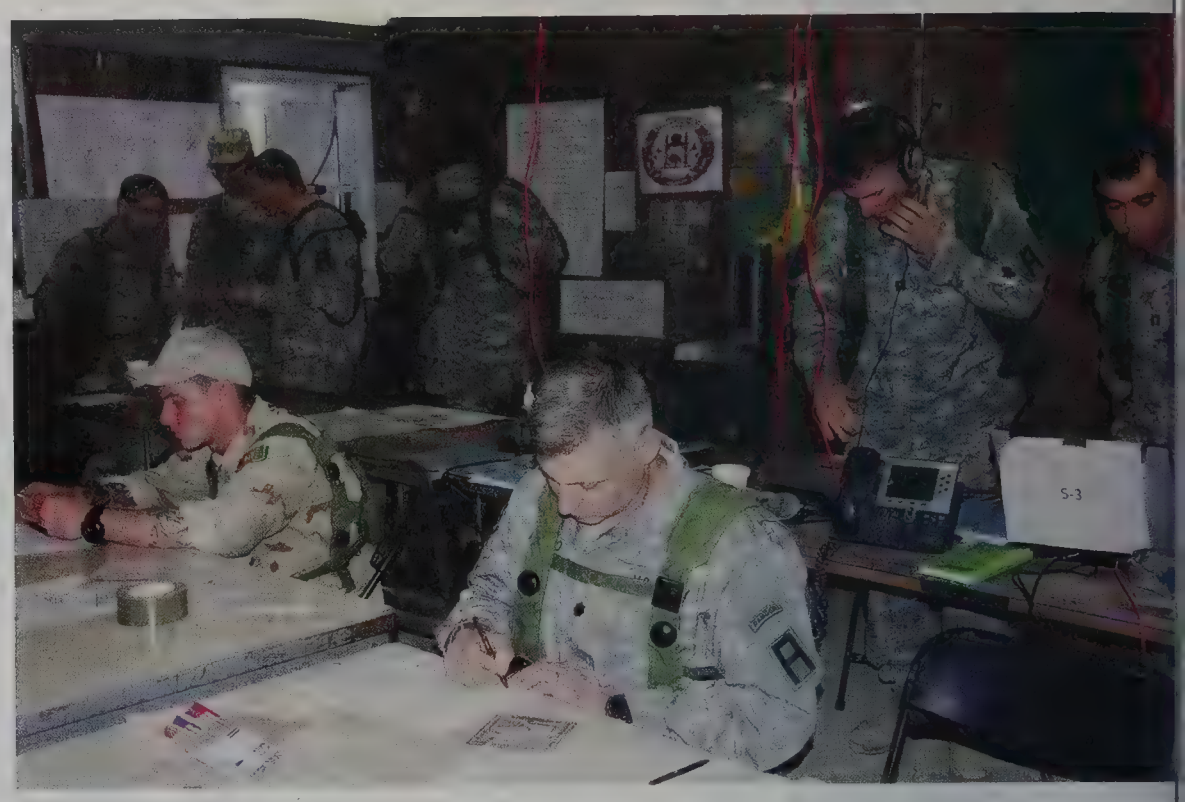
BOB BARRETT, VICE PRESIDENT OF HAWAII BASED COASTAL WINDOWS WITH EMPLOYEE AND U.S. ARMY RESERVE SERGEANT MICHAEL ECHIVERRI.

ARMY NATIONAL GUARD ★ ARMY RESERVE ★ NAVY RESERVE ★ MARINE RESERVE
COAST GUARD RESERVE ★ AIR NATIONAL GUARD ★ AIR FORCE RESERVE

We all serve. Whether serving our communities or our country, members of the National Guard and Reserve depend on their military units, families, and employers for support. Employer Support of the Guard and Reserve is a Department of Defense agency that seeks to promote a culture in which all American employers support and value the military service of their employees by recognizing outstanding support, increasing awareness of the law and resolving conflict through mediation.

ESGR®
EMPLOYER SUPPORT OF THE GUARD AND RESERVE

1555 WILSON BOULEVARD, STE 319, ARLINGTON, VA 22209 ★ 1-800-336-4590 ★ WWW.ESGR.MIL



LTC Lawrence Aiello (center), an operational control center team leader from First Army's 191st Infantry Brigade at JB Lewis-McChord, Wash., prepares to meet with Afghan role players during Security Force Assistance Team training.

cept will provide additional flexibility in this critical pillar of our military strategy in Afghanistan.

A 'Team of Teams'

First Army is U.S. Army Forces Command's executing agent for mobilization and demobilization. To execute the full range of tasks associated with this mission, we integrate a team-of-teams approach that uses the expertise and resources from organizations including Medical Command, Army Materiel Command, Army Sustainment Command, Installation Management Command, the Army Reserve Command (75th Mission Command Training Division and the 84th Training Command), our Army's combat training centers, Training and Doctrine Command and all of our Army's centers of excellence. These resources—synchronized, resourced and integrated—across the mobilization and demobilization spectrum ensure the quality of training, support and readiness of reserve component soldiers and units.

As our nation continued to increase emphasis on the quality care and support for our returning warfighters First Army significantly ramped up demobilization services and agency outreach.

This year, we also integrated the Department of Veteran Affairs and employer partnerships to improve the demobilization process. The medical readiness of returning soldier is the primary focus of demobilization. First Army ha worked closely with our partners from the Army Medica Command, Army Dental Command, U.S. Army Reserv Command and state surgeon offices within the Army Na tional Guard to develop procedures to ensure returning R soldiers receive the care and treatment they deserve. The de mobilization process is focused on developing a tailore plan of care for each soldier based o medical, behavioral health and denta health-care screenings. Demobilizatio validation boards ensure that all rede ploying soldiers are completely an properly processed through demobi lization before they are released fro active duty. When the medical care soldier needs cannot be provided at th mobilization training center (MTC), th soldier is assigned to the Warrior Tra sition Command in active duty statu or returned home with a reliable health care plan in place.

Servicemembers gather around a First Army Division East trainer mentor who is conducting training at JB McGuire-Dix-Lakehurst.

Future RC Training Support Strategy

First Army's top priority remains a RC deployment expeditionary forc (DEF) units and identified joint servic personnel mobilization, training, de ployment and demobilization. For F 2013, First Army is projecting a DE mission load of approximately 53,00 soldiers, sailors and airmen.

Association of the United States Army's

USA Pavilion

at DSEI 2013

10-13 September 2013

London, England

For exhibit space sales, contact
Amy Frankenstein at 703/841-4300 x 2413
or intlprogram@ausa.org.

www.ausa.org

U.S. COMMERCIAL SERVICE
United States of America
Department of Commerce

DSEI
ExCeL, London www.dsei.co.uk

The FY 2012 annual summer training season signaled the beginning of First Army's training support requirements for contingency expeditionary forces (CEF). These units are RC forces in the train/ready-3 year who participate in collective training exercises that prepare them to enter the available year of the Army Force Generation (ARFORGEN) model. In FY 2012, First Army provided training support to nine collective training events ranging from the Army Reserve Command's warrior exercises and combat support training exercise events to the National Guard's Exportable Combat Training Center exercises to Mission Command Training Program events.

In FY 2013, the CEF requirements will increase, and First Army will provide training support to a total of 21 CEF exercises conducted at regional collective training centers across the nation. Trained and ready reserve component CEF units are critical to maintaining our nation's strong defense and providing combatant commanders with a predictable, prioritized and flexible mission capability. CEF units are available to participate in combatant commander training exercises and theater security cooperation events around the globe based on mission demand.

First Army will continue to balance training support capabilities between DEF and CEF training requirements. The training support and tactical/functional mission command expertise provided by First Army is critical to sustaining RC readiness and providing a planned, predictable and reliable source of RC units for the Army to mission against global requirements.

Budget Constraints and Transformation

First Army continually assesses operational processes and procedures to ensure we provide good stewardship of the nation's resources while delivering high-quality, realistic and effective training. Throughout FY 2012, First Army has focused on achieving operational efficiencies and has achieved more than $29 million in cost savings/cost avoidance. With limited mission risk, First Army reduced costs by 20 percent in General Service Administration vehicle contracts, temporary duty/travel and personal service contracts.

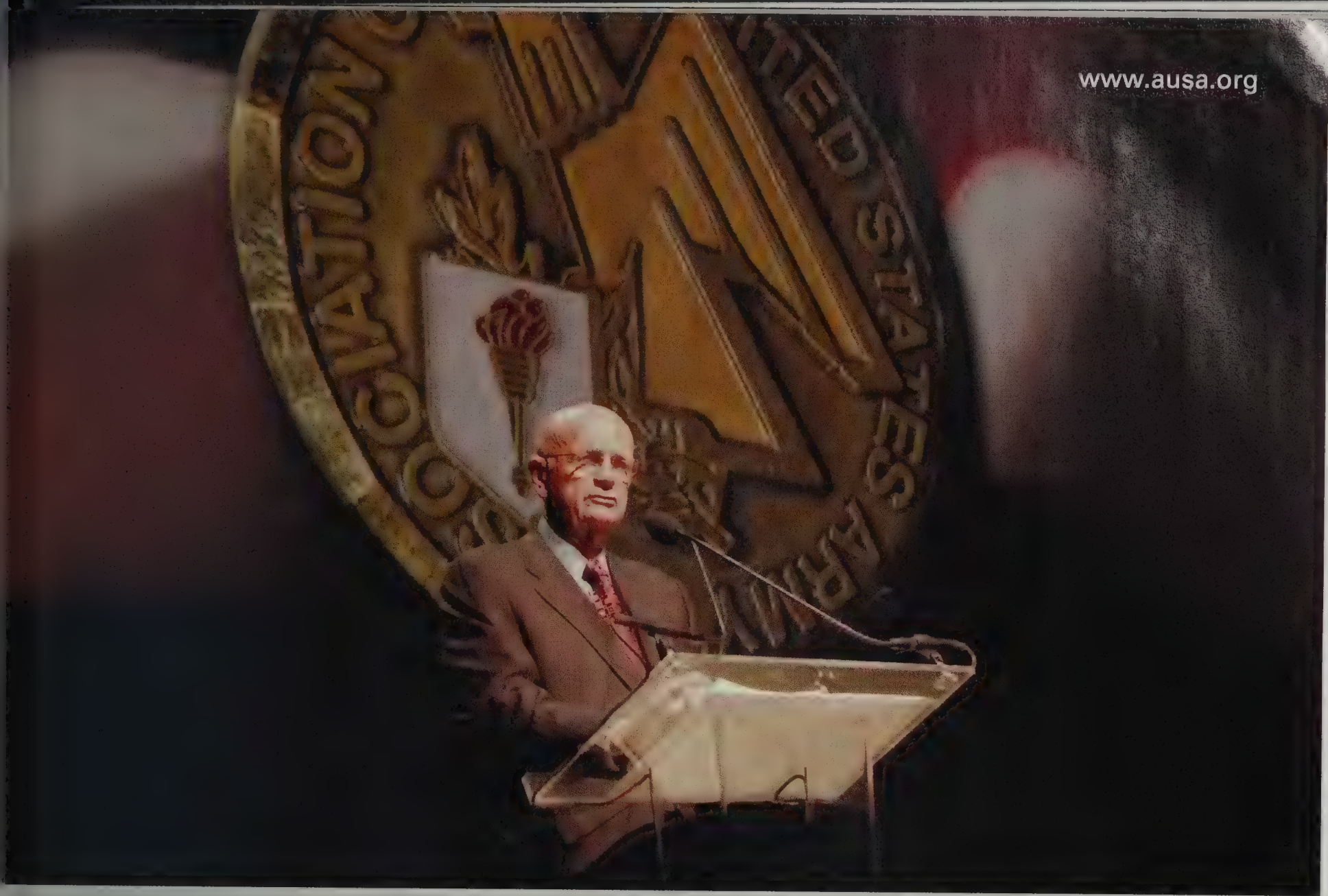
We will maintain our ability to execute enduring missions by continually focusing on improving the training of our T/Ms and taking advantage of available training and communication technology to reduce costs while still accomplishing our readiness and training requirements.

Scalable Mobilization Training Centers

During the peak mobilization period of 2005–09, 10 MTCs supported mobilization and deployment of almost 90,000 soldiers annually across the United States. We have decreased this strategic footprint for our nation over the last two years. Today and through FY 2013, First Army will use five active MTCs: Fort Bliss, Texas; Fort Hood, Texas; Fort Dix, N.J. (Joint Base McGuire-Dix-Lakehurst); Camp Atterbury, Ind.; and Camp Shelby, Miss., to mobilize, train, validate, deploy, redeploy and demobilize the RC forces needed to support contingency operations worldwide. First Army developed the scalable MTC concept to support a variable and dynamic mission load. This concept expands and contracts the number of active MTCs needed to match mobilization and deployment requirements. First Army anticipates that five active MTCs will meet projected requirements through FY 2013; the mobilization enterprise partners, however, remain adaptable and flexible to expand or contract as necessary to meet requirements.

The Department of Defense is re-entering a period of budget constraints and unknown, adaptive adversaries. The Army is also shifting from a counterinsurgency fight back to providing a full range of military operations capability. The operational RC force will continue to provide the nation with needed military skill sets and capabilities. First Army plays a vital role in sustaining the readiness of the nation's RC forces by maximizing enterprise partnerships and focusing on mission flexibility, unit adaptability and fiscal efficiency. ★

Between events during the First Army 2012 Best Warrior Competition at JB Lewis-McChord, SSG James Severin, First Army Division East Champion, practices drawing his 9 mm pistol.



Over 650 of the world's leading defense companies are members of the AUSA Sustaining Membership Program. Is yours?

The Association of the United States Army's (AUSA) Sustaining Membership Program is your vital link to Army decision-makers at the highest levels. As the Army's professional organization, AUSA has played a role in strengthening national security for over 60 years by facilitating partnerships between military decision-makers and industry leaders.

When you join AUSA's Sustaining Membership Program, your company's executives will have the opportunity to share ideas with top Army officials at AUSA events. These events are conducted and attended by high level Army decision-makers, DoD officials and industry leaders – the individuals who are setting the agenda for the Army's future!

Join us today and discover what the AUSA Sustaining Membership Program can do for your business.

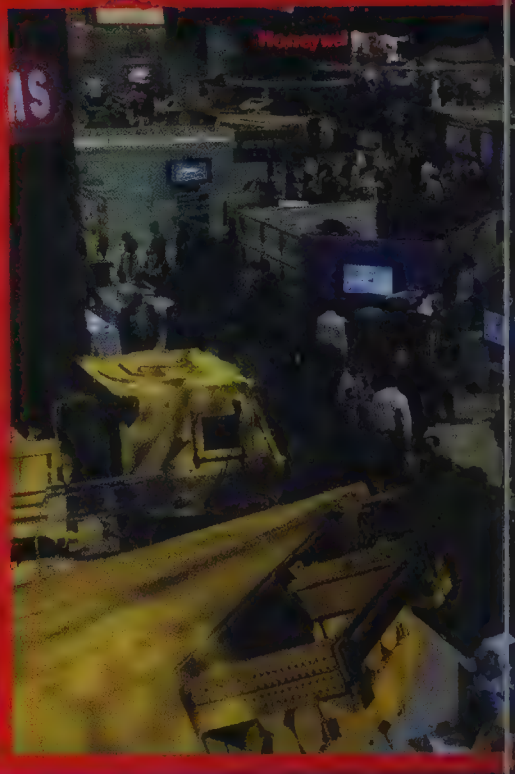
AUSA Sustaining Membership Program:
Supporting the Army–Industry Partnership

Association of the United States Army
2425 Wilson Boulevard • Arlington, VA 22201 • (703) 841-4300 ext. 2665 • www.ausa.org

Association of the United States Army's

USA Pavilion

at IDEF 2013



Early Bird rate - $810/m², effective until 1 October.
Standard rate - $910/m²

7-10 May 2013

Istanbul, Turkey

For exhibit space sales, contact
Amy Frankenstein at 703/841-4300 x2413
or intlprogram@ausa.org.

www.ausa.org

Third Army/ARCENT: Shaping for the Future

By LTG Vincent K. Brooks
Commanding General, Third Army/
U.S. Army Central Command

What a year it has been for Third Army/U.S. Army Central Command (ARCENT)—both at home and in the U.S. Central Command (CENTCOM) area of responsibility (AOR)!

We settled into our new home on Shaw Air Force Base (AFB) in Sumter, S.C., as directed by Base Realignment and Closure 2005. The Third Army/ARCENT team worked hard to make the beautiful new facility fully functional, to build relationships with the Sumter community and its Air Force hosts, and to grow deeper roots in our new hometown.

In the CENTCOM AOR, the continuously running "Arab Spring" brought tremendous changes, turmoil, challenges and opportunities for the people and governments of the Middle East and also for the United States' long-

Members of Team Shaw, Shaw Air Force Base, Sumter, S.C., lower the U.S. flag during a ceremony on National Prisoners of War/Missing in Action Recognition Day. During the 2011 ceremony, Louis Blanding Fowler, former prisoner of war, spoke about his service in World War II and was presented a POW/MIA flag.

term relationships in this strategically vital region. Operation New Dawn drew to a close and opened the door for a renewed U.S.-Iraq strategic relationship. Operation Enduring Freedom continues to evolve with ever increasing Afghan-led security and a shifting role for the NATO International Security Assistance Force moving forward. The importance of Pakistan and the Central Asian states to an enduring peace in Afghanistan is challenged by both internal and external pressures and actors.

In the midst of all this change, challenge and opportunity, Third Army/ARCENT has accomplished some great things and continued to play its essential role as the Army Service Component Command responding to CENTCOM and to the Army in support of the more than 140,000 Army forces in theater. We also recognized the need to reassess our direction and focus in order to better adapt to the changing environment. As the leading edge of this effort, the Third Army/ARCENT team developed and published a new campaign plan, which refocused our mission to reflect the core role of shaping and to provide a renewed focus on theater security cooperation (TSC) events over the recent focus of sustainment activities. While Third Army/ARCENT continues to operate along Ready, Shape and Sustain lines of effort, it has refined the focus of those lines of effort and reemphasized the importance of Shape. In addition, the tea added two new lines of effort: Transition and Communicat

As we look ahead, our overriding priority must be succeed in current operations, but we are also adjusting ou strategy to better confront the most pressing future secu rity needs. Adding Transition and Communicate to ou lines of effort reflects our view of the future Thir Army/ARCENT security environment and our judgmen about the kind of organization we need.

End of Operation New Dawn/Looking to Afghanista

The redeployment, retrograde and repositioning troops and equipment officially started in 2010 at the end combat operations in Iraq as the United States made th transition to Operation New Dawn. It was at that time th Third Army/ARCENT moved from phase one of Oper tion Nickel II to phase two, when equipment and personn were responsibly retrograded, redeployed or reposture Acting as the quarterback of the varied supporting effort Third Army/ARCENT carried out the plan of U.S. Force Iraq, which was the supported command. This process w the beginning of the end as the team of teams continued th mission of shrinking the logistical footprint in Iraq to me the Presidential directive and the 2008 Status of Forc Agreement of withdrawing all troops by December 31, 201

The drawdown mission from Iraq will be regarde highly in the years ahead because of the great efforts of a the organizations and people that made it possible. Th scale of this operation reflects the exceedingly evolved c pability of joint logistics. The complexity of this missio was reflected by 1,300 tasks that had to be completed befo the transfer of authority between the Department of D fense and Department of State.

There was little time to celebrate the successful missio in Iraq. By Presidential order, the U.S. military was po tured to execute surge recovery operations in Afghanista

***LTG Vincent K. Brooks** assumed command of the Third Army/USARCENT in June 2011. LTG Brooks most recently commanded Fort Riley, Kan., and, concurrently, the 1st Infantry Division. During his 31 years as a commissioned officer, he has served in command and staff positions in the United States, in Germany during the Cold War, in Korea, in Kosovo and in the Middle East. He served at the national level in the Pentagon within Headquarters, Department of the Army and the Joint Staff. A graduate of the U.S. Military Academy, he has a master's degree in military art and science from the School of Advanced Military Studies at the U.S. Army Command and General Staff College and an honorary doctor of laws degree from the New England School of Law in Boston. LTG Brooks also served as a national security fellow at the Harvard University John F. Kennedy School of Government.*

This involved a troop reduction of 33,000 by September 15. Third Army/ARCENT executed the first phase of the operation by providing the support needed to ensure that 10,000 troops were redeployed by December 31, 2011. Looking ahead, we have 41,000 vehicles and 70,000 containers in Afghanistan. These represent only two hurdles, and I'm certain our mission there will prove to be even more challenging. We will need to bring to bear many of the same skills and teamwork that led to success in Operation New Dawn to reposture for Operation Enduring Freedom.

Building Partnerships

The mission will be successfully completed through something we call exporting professionalism—military professionalism, and that's what we do best. Third Army/ARCENT continues to support and operate from the main command post located at Shaw AFB, S.C. We have built strong relationships with our Air Force brothers and sisters—the 20th Fighter Wing, 9th Air Force, and U.S. Air Forces Central—as well as with the city of Sumter and surrounding communities.

As an organization, Third Army/ARCENT represents many things, such as strength, teamwork and the security of the nation. Those who support us want to be able to interact with us as trusted members of the community. Each relationship that is formed in the community is similar to adding a brick to the foundation. Third Army/ARCENT has the power to help shape the community, but it's our people—our soldiers, our government civilians and our families, the team of teams—who make that happen.

Days after the drawdown in Iraq, 1st Brigade Combat Team, 34th Red Bull Infantry Division, Minnesota Army National Guard and the 29th Combat Aviation Brigade from the Maryland Army National Guard joined 1st Brigade, 1st Cavalry Division, from Fort Hood, Texas, in Kuwait. The purpose was to support the Third Army/ARCENT's team and mission to combine training and partnership-building activities with other countries in the region to develop and maintain security and stability.

Third Army/ARCENT has hosted a large number of TSC activities, involving training in logistics, medicine, combat and communications to help shape the international environment through engagement with our partners. We help build their capacity to defend themselves by fostering mutual understanding through military-to-military contacts and closely working together.

Building partnership capacities elsewhere in the world remains important for Third Army/ARCENT to sharing the costs and responsibilities of global leadership and accountability, while at the same time maintaining our current partnerships. Third Army/ARCENT will continue to build closer relationships in areas of mutual interest and will be a contributor across a broad range of issues.

Force Posture

Third Army/ARCENT strives daily to make a positive difference during one of the most challenging times in our history. With nearly 800 personnel forward and 1,200 at Shaw AFB, Third Army/ARCENT maintains support elements to all ground forces in CENTCOM's 20-nation area

U.S. and Kuwaiti servicemembers unite to close the gate between Kuwait and Iraq after the final convoy of Operation New Dawn passed through in December 2011. Third Army is shaping the future of the U.S. Central Command area of operations by honoring and meeting all agreements and deadlines with partner nations.

At Camp Illisky, Kazakhstan, during exercise Steppe Eagle in 2011, LTC John Johnson, 3rd Medical Deployment Support Command (MDSC) medical officer in charge (second from right), and SSG Scott Linnell, 3rd MDSC medical noncommissioned officer in charge, escort a casualty from a helicopter with the help of Kazakh soldiers as part of a medical evacuation exercise.

of responsibility and stands ready to conduct full spectrum operations anytime and anywhere.

As we make the transition to future force development, we will continue to benefit from the combination of active and reserve component elements.

During the past decade, the National Guard and Reserve have consistently demonstrated their readiness and ability to make sustained contributions to Third Army/ARCENT and national security. The reserve component remains vital to our daily work.

Third Army/ARCENT has established relationships with many nations, which has proven to be essential in supporting the transfer of U.S. supplies in and out of landlocked Afghanistan. While helping accelerate the buildup in Afghanistan, Third Army/ARCENT has been planning and executing its drawdown. The command also maintains shipping, storage, maintenance, refurbishment, repair, training and deployment facilities throughout the AOR in support of U.S. ground forces' operations.

As we look to future surge recovery operations in Afghanistan, many of the lessons learned from Iraq will apply. Looking ahead, it i critical that we continue to remain versatile, adaptable an committed. Third Army/ARCENT is a great place to serv and has shown its dedication to building relationships an partnerships both at home and abroad. We continue to buil on conditions that enhance trust, cooperation and mutual re spect with our regional and partner nations in the CENT COM AOR. I'm proud of the Third Army/ARCENT tean of soldiers, civilians and families who work hard each an every day to carry on a proud legacy for the Army and ou nation. Third, Always First!

LTG Vincent K. Brooks, commanding general, Third Army/U.S. Army Central Command (center), SFC Christopher Bell (left) and PFC Maria Rattery lay a wreath at the eternal flame in 28th Panfilov Heroes War Memorial Park, Almaty, Kazakhstan, during Steppe Eagle in 2011.

PFC Matthew Zajac, US Army, 2nd Infantry Division, Fort Carson, Colorado and his father, Mike, photographed at a Fisher House in San Antonio, Texas.

FISHER HOUSE
HELPING MILITARY FAMILIES

Fisher House Foundation's Hero Miles program provides military members and their loved ones free round-trip airline tickets, sending them to the bedside of their injured service member recovering at a military or VA medical center. Flights are made possible through frequent flyer mile donations by individual airline passengers.

Since its inception in 2004, the generosity of the public has allowed Hero Miles to distribute more than 25,000 airline tickets, saving our heroes and their families more than $40 million. Help reunite America's heroes with their loved ones by donating your miles today. Your contribution will make you a hero to those in need.

For more information, visit **www.fisherhouse.org** and click on *Hero Miles.*

HERO MILES

The Hero Miles program is grateful to our generous partners, including:
AirTran Airways ★ Alaska Airlines ★ American Airlines ★ Continental Airlines
Delta Air Lines ★ Frontier/Midwest Airlines ★ United Airlines ★ US Airways

Hero Miles is a program of the nonprofit Fisher House Foundation.
More information on the Foundation can be found at www.fisherhouse.org.

©2011 Fisher House Foundation / Brendan Mattingly Photography / Don Schaaf & Friends, Inc.

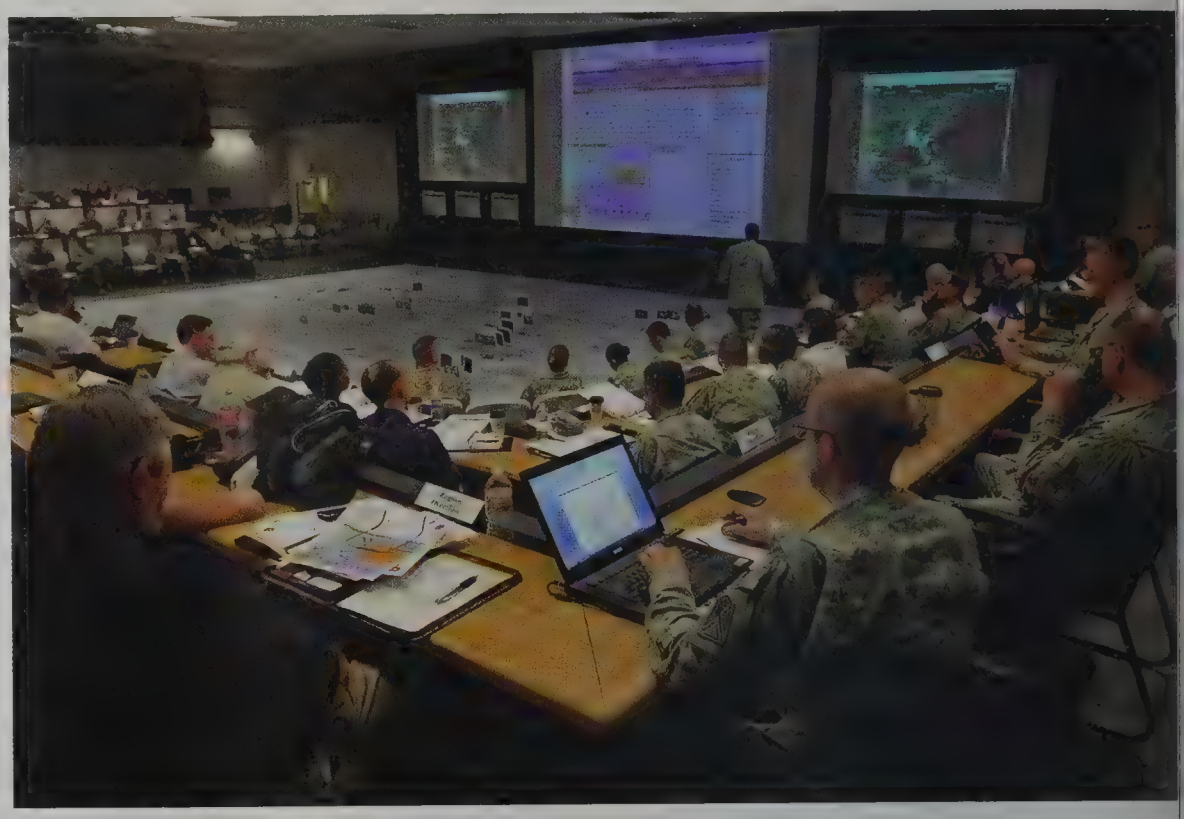
www.ausawinter.org
AUSA
ILW Winter
Symposium
& Exposition
20-22 FEBRUARY 2013
Greater Fort Lauderdale
Broward County
Convention Center
A Professional
Development Forum
VISION
FOR THE FUTURE
within arm's reach of the insights and leadership guiding the transition of the U.S. Army. Plus, nowhere
more impressive display of innovations and advanced technologies. Tap into the latest information and
minute insights and network within the Army community at the AUSA ILW Winter Symposium and Exposition.
20-22 February 2013 in Ft. Lauderdale, FL. For information, contact Alex Brody 703.907.2665
THE INSTITUTE OF LAND WARFARE
A U S A

U.S. Army North: We Must Not Fail

By LTG William B. Caldwell IV
Commanding General,
U.S. Army North (Fifth Army)

Thanks to the extraordinary efforts of various law-enforcement agencies and military forces abroad, dozens of terrorist plots against the United States have been uncovered, deterred or defeated. Our country, however, remains vulnerable.

Although al Qaeda's central leadership has been severely degraded, its affiliates and homegrown terrorists continue to plan attacks against the United States—attacks that could involve chemical, biological, radiological or nuclear (CBRN) weapons. Transnational criminal organizations (TCOs) also pose a threat to our nation, exploiting vulnerabilities along our borders. Finally, man-made and natural disasters—such as hurricanes, earthquakes and industrial accidents—can strike with little to no warning with devastating destruction.



U.S. Army North's interagency hurricane response drill, held at Fort Sam Houston, Texas, in April, teamed military and civilian emergency response leaders to determine efficiencies and best practices in hurricane response in advance of the 2012 season.

Enter U.S. Army North (Fifth Army), America's go-to headquarters for land operations in support of homeland defense, defense support of civil authorities (DSCA) and theater security cooperation in partnership with the armies of Mexico, Canada and the Bahamas. As the Army service component command for U.S. Northern Command (USNORTHCOM), Army North stands ready to respond to protect American citizens and our way of life. Our mission is a no-fail sacred trust to the American people. Simply put, we must not fail.

The strength of Army North rests in its people. Army North is a dedicated team of active duty, Reserve, and National Guard soldiers and Department of the Army civilians. Together, we work with agencies and departments within the federal government as well as at the state and local levels. Our unique composition of forces and legal authorities is our strength, which we leverage to accomplish our no-fail mission. Though Army North has relatively few assigned assets, both its organic and operationally controlled forces provide USNORTHCOM with unique capabilities to execute its responsibilities in our nation.

Army North's organic contingency command post (CCP), known as Task Force 51, stands ready to provide Mission Command for all federal land forces assigned or attached to USNORTHCOM during homeland defense and civil support missions by supporting the lead federal or local agency. The CCP is a rapidly deployable, standing organization of approximately 100 personnel and is augmented with members from the Army North staff during a major disaster or emergency. The CCP has robust communications capabilities and uses vehicles such as the Sentinel, ar 18-wheel mobile command post that can be rapidly deployed aboard a C-17 Globemaster.

Joint Task Force-North (JTF-N)—at Fort Bliss, Texas, and under Army North's operational control—is USNORTHCOM's organization chartered to provide counter-narcotics support to our nation's law-enforcement agencies JTF-N has provided unique military capabilities to law enforcement for 22 years, assisting in the identification and interdiction of suspected transnational criminal organizations. These missions support USNORTHCOM's defense of our country in depth by focusing on the approaches along the borders of the continental United States. JTF-N's law enforcement support operations also provide a unique interagency operational environment to train DoD units for real-world contingency missions. Finally, Joint Task Force-Civil Support (JTF-CS), under the operational control of Army North, is USNORTHCOM's standing joint task force for CBRN response operations. JTF-CS maintains a full-time staff trained to conduct defense support of civilian authorities and to respond to CBRN incidents, and i anticipates, plans and integrates USNORTHCOM's CBRN response operations. When directed, JTF-CS deploys an assessment element within four hours of an incident, followed by a headquarters that provides command and control over assigned federal response forces.

Theater Security Cooperation

Army North has embarked on an unprecedented outreach program with the Mexican army. Not only does this help to protect our country in depth, but it also allows both nations to address mutual security concerns. Although the Mexican army participated in only three training events with the U.S. military as recently as fiscal year (FY) 2009, during FY 2012 our two nations participated in nearly 100 events, including 17 "train-the-trainer" programs in areas such as force protection, social communications and even air-mobile operations

LTG William B. Caldwell IV *is the commanding general of U.S. Army North (Fifth Army). He recently served as the commander, NATO Training Mission-Afghanistan and Combined Security Transition Command-Afghanistan. Before his deployment to Afghanistan, he served as the commanding general for the U.S. Army Combined Arms Center and Fort Leavenworth, Kan. During his career he has supported Operations Iraqi Freedom, Restore/Uphold Democracy, Desert Shield, Desert Storm and Just Cause. LTG Caldwell was commissioned as an Infantry officer from the U.S. Military Academy at West Point and holds master's degrees from the U.S. Naval Postgraduate School and from the School for Advanced Military Studies at the U.S. Army Command and General Staff College.*

EXELIS
THE POWER OF INGENUITY

Evolving battlespace.
Global capabilities.
Ready-now solutions.

Emerging markets

Exelis is building our portfolio of global civil and commercial solutions:

- Air Traffic Management
- Space Systems
- Radar Systems
- Composites
- Medical Device Components
- Alternative uses for defense technology, such as energy management and medical devices

Video and images
Anywhere, anytime
Deployable geospatial
intelligence with JAGWIRE.

Flexibility in development
Dedication to your mission
From composites to
systems integration

Ingenuity in action

On the battlefield, warfighters need an edge. From enhanced night vision systems to networked communications, America's troops and its allies remain one step ahead through the application of advanced technology solutions from Exelis. In fact, in over 120 vehicle types, as well as on air and sea platforms, you'll find Exelis at work. You will also find Exelis within commercial air traffic management systems aboard every GPS satellite ever launched and delivering innovative solutions around the globe.

Agile, proven technology
Exceptional solutions
Readiness in an uncertain future.

EXELIS
THE POWER OF INGENUITY

Ready-now solutions for the Army

Exelis is a top aerospace, defense and information technology firm involved in electronic, geospatial information and mission systems. You can count on our proven expertise in platform-agnostic network communications, sensing and surveillance, electronic warfare, air traffic solutions and information systems. With a diverse array of investments internally and a dedication to operational agility and efficiency, we're ready to meet mission needs on time and on budget.

- Satellite and Networked Communications
- Multi-Sensor Night Vision Goggles
- Composite Structures
- Electronic Warfare and Airborne Electronic Attack
- Cyber Security and Information Assurance
- Persistent Surveillance

The value of Exelis

Throughout our history, a unique set of benefits have led to our success, as well as the success of our customers and partners.

- Platform Agnosticism
- Cost Competitiveness
- Rapidly-Fielded Solutions
- Empowering Mission Success
- Modernizing Existing Platforms and Developing New Ones
- World-Class Innovation
- Affordability and Readiness

It's not just technology, it's people

It's more than 20,000 engineers, scientists, information technologists and business professionals committed to solving problems that help to safeguard those in the air, on the ground and at sea. It's keeping flights safe for travelers and supporting first responders within our cities and around the world. It's the people of Exelis helping others through new technology, new ideas and the commitment to understanding customers' mission needs through the development of highly advanced, affordable solutions.

Empowering mission success
In air, land, sea and space
On the battlefield, the border, the control room and beyond.

Agile thinking.
Focused problem solving.
Real-world solutions.

Images courtesy of U.S. Army. Apache taken by Tech. Sgt. Matt Hecht; Soldier on patrol taken by Staff Sgt. Jason Epperson; MRAP vehicle taken by Spc. Elisebet Freeburg. Additional image credits: Pentagon photo courtesy of GeoEye.

Any challenge.
Every platform.
Exceptional solutions.

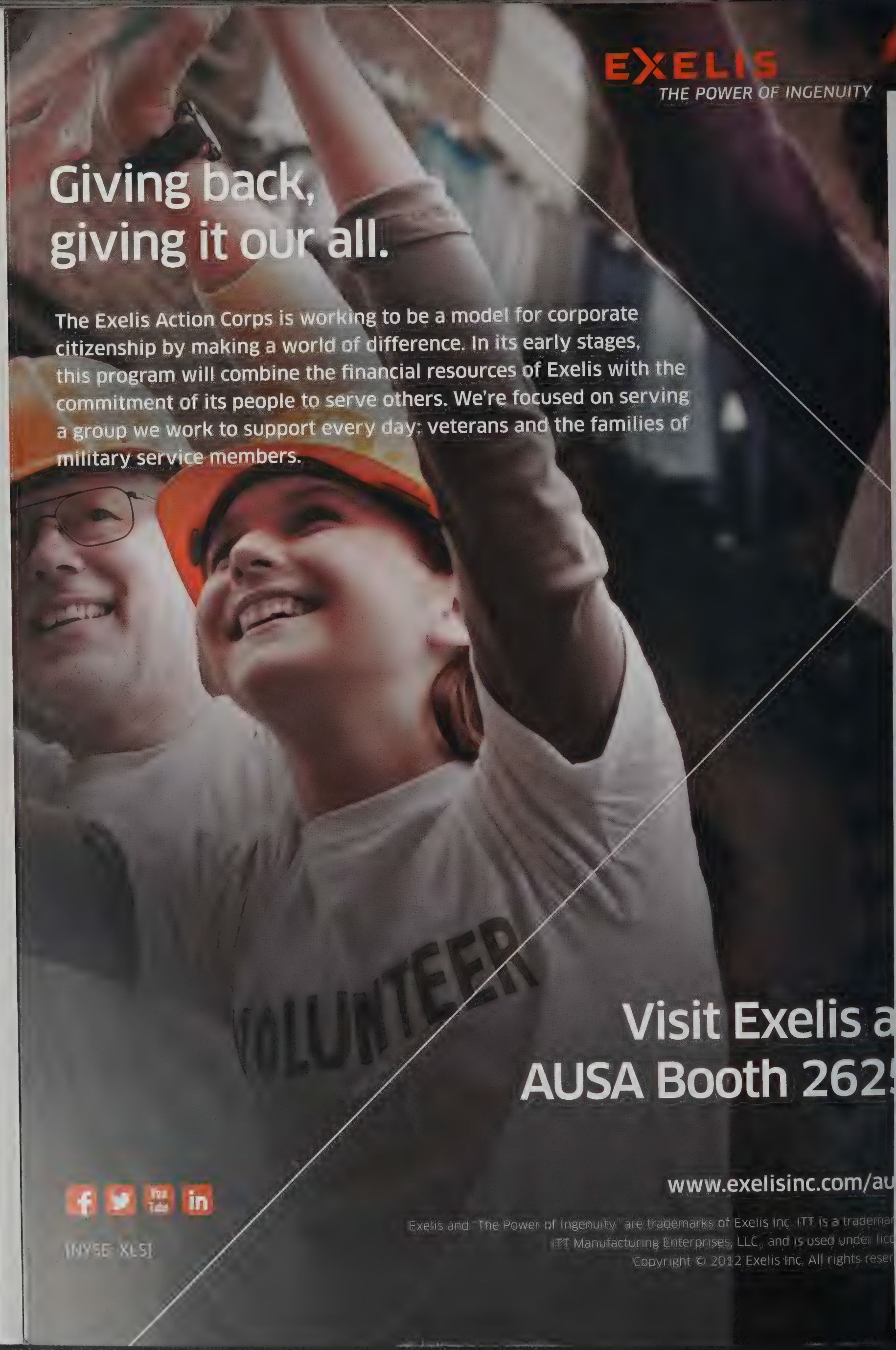
A strong legacy and an exciting future. ITT Exelis is focused on the fast-evolving needs of military, government and commercial customers around the world. We're the innovative partner we've always been – with more capabilities than ever. Our core capabilities are dedicated to aerospace and defense priorities, like intelligence and surveillance, information security and logistics support.

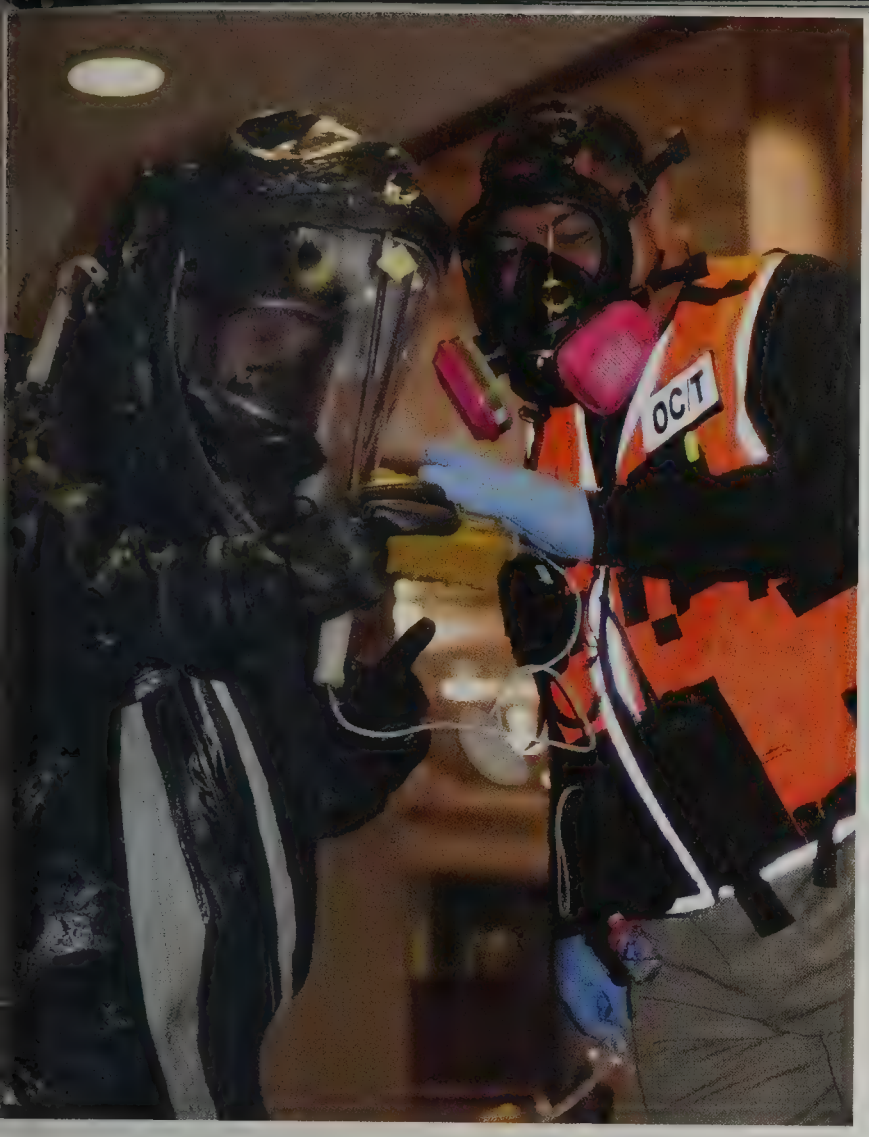
C4ISR Electronics and Systems

- Airborne Electronic Attack
- Integrated Electronic Warfare Systems
- Communications and Force Protection Systems
- Radar, Reconnaissance and Acoustic Systems
- Integrated Structures/Composites
- Night Vision and Imaging
- Intelligence, Surveillance and Reconnaissance Systems
- Position, Navigation and Timing

Information and Technical Services

- Air Traffic Management
- Network Systems
- Advanced Information Systems
- Communications and Information Systems
- Space, Ground and Range Systems
- Middle East and Afghanistan Programs
- U.S. and European Programs


EXELIS
THE POWER OF INGENUITY
Giving back,
giving it our all.
The Exelis Action Corps is working to be a model for corporate citizenship by making a world of difference. In its early stages, this program will combine the financial resources of Exelis with the commitment of its people to serve others. We're focused on serving a group we work to support every day: veterans and the families of military service members.
VOLUNTEER
Visit Exelis a
AUSA Booth 262
www.exelisinc.com/au
(NYSE: XLS)
Exelis and "The Power of Ingenuity" are trademarks of Exelis Inc. ITT is a trademar
ITT Manufacturing Enterprises, LLC., and is used under lice
Copyright © 2012 Exelis Inc. All rights reser



Javier Rodriguez-Ramos (right), observer controller, Army North's Civil Support Training Activity Team, helps a member of the 55th Civil Support Team, Minnesota Army National Guard, learn to use a chemical detection device that determines chemical exposure.

In addition, our nations took part in a 17-week intelligence training course. The course covered the entire intelligence discipline and will help our Mexican partners collect and process intelligence at the lowest tactical level.

Army North has also begun to partner with the Mexican army during joint civil support exercises. This year's Ardent Sentry exercise was the first-ever exercise in which the U.S. Army exchanged liaison officers with the Mexican army. Ardent Sentry simulated a bilateral response to a Category 4 hurricane at our common border. The exercise demonstrated the value of mutual civil support cooperation.

The U.S. Army has long partnered with the Mexican army under a program that was established after World War II. Known today as FIARP—the Fifth Army Inter-American Relationship Program—it is designed to increase understanding between the U.S. and Mexican armies and to better improve coordination between our two nations. This year's FIARP event was the most significant to date. Six Mexican three-star generals spent four days in Washington, D.C., participating in a series of talks focused on regional and bilateral security issues. Our Mexican counterparts were warmly received by senior leaders from the Department of Defense as well as our interagency partners, paving the way for further cooperation.

This past spring, the Mexican government also hosted the first-ever Three-Star Executive Seminar, composed of 12 U.S. Army three-star generals, who met with Mexico's 12 regional commanders. The U.S. and Mexican officials discussed a number of issues, including mutual efforts to combat transnational criminal organizations.

In the upcoming year, Army North, as the lead DoD agency, will continue to expand army-to-army relations with our Mexican partners. Our focus is improving trust and confidence as we collectively address the range of mutual security concerns confronting both our nations.

CBRN Response Enterprise

The nation's CBRN response enterprise is a comprehensive package of Title 32 and Title 10 actions. Together, federal and state forces can bring more than 18,000 uniformed personnel—including logistical, medical, security and aviation assets—to bear in the event of a crisis. Title 32 forces consist of 54 state-controlled weapons of mass destruction-civil support teams (WMD-CSTs), 17 CBRN enhanced force response packages and 10 regionally aligned homeland response forces. These forces can be augmented with Title 10 assets, including defense CBRN response forces and command and control CBRN response elements.

Army North also helps facilitate homeland-focused CBRN training for the Army National Guard's 54 WMD-CSTs. Army North's agency for CBRN training is its Civil Support Training Activity (CSTA) at Joint Base San Antonio, Texas. CSTA facilitates large-scale situational training exercises to create a realistic training environment for the nation's immediate CBRN response forces. In the third quarter of FY 2012 alone, CSTA facilitated more than 60 CBRN

Mexican military liaison officers from the National Defense Secretariat (SEDENA), brief members of Army North's Main Command Post during Ardent Sentry 12, a May defense support to civil authority exercise directed by the Joint Chiefs of Staff and executed by Army North and SEDENA's 4th Military Region.

U.S. Army North facilitated a Department of Homeland Security/ DoD future requirements conference at Joint Base San Antonio, Texas, in January that brought together planners and officials from more than 20 government and military organizations to discuss the protection of the Southwest U.S. border.

training events, involving mass casualty decontamination, medical training, and search and extraction.

'Always in Support'

As part of the Department of Homeland Security's National Response Framework, Army North may serve as the headquarters for Army forces as they provide defense support of civil authorities. Army North supports a state's lead federal agency or dual-status commander in any disaster response and brings command and control, logistics, and intelligence functions in support of federal and state responders. If required, Army North can provide command and control to augment first responders and state government in response to a catastrophic event.

During an emergency or disaster, Army North works through its 10 defense coordinating elements (DCEs), embedded within the headquarters of the Federal Emergency Management Agency's (FEMA) 10 regional headquarters throughout the United States. Each DCE is led by a defense coordinating officer (an Army colonel), who leads a staff o eight officers and senior noncommissioned officers, plus tw Department of the Army civilians. The DCE may be aug mented by elements of the Army North staff as required. Th DCEs play a vital role in coordinating and synchronizin federal military support during an emergency within thei FEMA regions.

Each year, Army North hosts a multilateral exercis known as Vibrant Response at Camp Atterbury, Ind. Th scenario—a 10-kiloton nuclear detonation within a majo urban area—joins multiple federal and state agencies to co ordinate a response. The exercise involves nearly 8,000 per sonnel, including 250 actors, 350 medical mannequins an nearly 20 tons of rubble. This year' Vibrant Response exercise was the firs of its kind to integrate CBRN respons elements from both the federal an state governments. In terms of rea world security missions during 201 Army North personnel supported civ authorities at the NATO and G-8 cor ferences, as well as Super Bowl XLV and both the Republican and Democ ratic National Conventions.

An emergency response vehicle, one of three used by Army North, provides Internet access during Ardent Sentry 12, a joint exercise that helped train servicemembers to support state and local officials during a natural disaster.

We Must Not Fail

While U.S. forces are globally de ployed and engaged on a number c fronts, Army North remains focuse on our country. As we know all to well, the threats to our citizens an way of life are real and persistent. A we work together with our joint, in teragency and multinational partner we also stand ready to respond to an incident, no matter how large. Wit the lives of the American people a risk, we must not fail. ★

Eighth Army

Maintaining Peace and Stability On the Korean Peninsula

By LTG John D. Johnson
Commanding General, Eighth U.S. Army

On duty in the Western Pacific since 1944, Eighth Army's enduring presence has long signaled U.S. resolve to our regional allies and potential adversaries alike. It is Eighth Army—America's Pacific victors—that stands ready today to defend our national interests and those of our allies whenever called upon, in armistice, in contingency or in war. We are the embodiment of our U.S. Army's military professionalism. We are proud. We are skilled. We are tough. We are ready to "Fight Tonight."

The potential for proliferation of weapons of mass destruction, the emergence of global competitors, threats to the global commons, and the provocative and dangerous regime in North Korea demand that Eighth Army now assume a more prominent-ready posture.

Soldiers from the 1st Armored Brigade Combat Team, 2nd Infantry Division, engage a target from an M1A2SEP tank on Rodriguez Range, a live-fire complex near Pocheon, South Korea. The 2nd Infantry Division trains to execute any mission against a hybrid threat across the full spectrum of conflict.

A Real and Imminent Threat

The 2010 sinking of the Republic of Korea (ROK) naval vessel *Cheonan*, the unprovoked artillery attack on South Korea's Yeonpyeong Island eight months later and the recent failed intercontinental ballistic missile launch in defiance of U.N. resolutions demonstrate that the North Korean threat is real, imminent and a direct challenge to the ROK-U.S. Alliance. The cycle of North Korean provocations is likely to continue, and Eighth Army must be prepared to deter and respond—alongside our ROK allies—at any time. We must be prepared to fight in an exceptionally complex environment across challenging and unforgiving terrain and in extreme weather conditions against a lethal and dedicated adversary who is a master of his environment.

Revolutionary Change in Mission

Eighth Army has fundamentally changed from its previous role as an Army service component command to an operational field headquarters that commands and controls a warfighting ROK-U.S. combined joint task force. This change is revolutionary in scope and requires significant modification in how we think, train, maintain and equip our combat force. Eighth Army now possesses skill unique capabilities and a mission that requires the condu of unified land operations in a chemical, biological and nu clear environment while confronting emerging threats. S multaneously, Eighth Army serves as the Korea Theater Operations Army Forces command, charged with the mi sion of conducting noncombatant evacuation operatio and providing support to U.S. and allied forces reinforcin the Peninsula in the event of crisis.

Boots on the Ground

Eighth Army soldiers are disciplined, physically fit, re silient, culturally adept, and tactically and technically prof cient in the profession of arms. We are ambassadors for ou country and our way of life as we seek to build and rei force relationships that share our cultures in a spirit of mu tual trust and respect. Our soldiers are geographically di persed throughout the Peninsula, serving at more than 7 garrison locations.

Major subordinate commands (MSCs) of Eighth Army o the Korean Peninsula include the 2nd Infantry Divisio 19th Expeditionary Sustainment Command, 35th Air D fense Artillery Brigade, 65th Medical Brigade, 501st Mil tary Intelligence Brigade, and 1st Signal Brigade.

The 2nd Infantry Division (2ID) is the last remainin permanently forward-stationed division in the U.S. Arm and the dominant armored land force in the Asia-Pacific r gion. Standing shoulder to shoulder with first-echelon K rean units south of the Demilitarized Zone, the division composed of three brigades, with most of its 10,000 U. and Korean Augmentation to the United States Army (KA TUSA) soldiers serving north of the capitol in Seoul. In ad dition, it is equipped with the most modern and leth weapons that exist in the world today. In order to ensu the division's readiness to conduct combat operations at moment's notice, 2ID units conduct more combined liv fire training than any other unit in the Army. Interoperabi

***LTG John D. Johnson** is the commanding general, Eighth Army, Korea. He has served as the assistant division commander for Maneuver, 2nd Infantry Division, Korea; deputy commanding general, Family and Morale, Welfare and Recreation Command; and deputy commanding general, Operations, I Corps and Fort Lewis, Wash., including deploying with the headquarters for Multi-National Corps-Iraq. He then served as the acting commanding general of I Corps and Joint Base Lewis-McChord. A graduate of the Virginia Military Institute, he has attended the Command and General Staff College, the School of Advanced Military Studies and the U.S. Army War College, among others.*

2012 AUSA

ANNUAL MEETING AND EXPOSITION

A Professional Development Forum

ASSOCIATION OF THE UNITED STATES ARMY

AMERICA'S ARMY:

SERVICE TO THE NATION, STRENGTH FOR THE FUTURE

Why You Should Attend

- Join over 35,000 people from the world-wide defense community
- Network with key leaders from the Army, DoD, Congress and the defense industry
- View over 700 exhibits featuring the latest technology, products and services
- Participate in panel discussions on the state of the Army and the future of national defense

Don't miss this chance to build relationships and advance your knowledge!

Register Today!

22-24 OCTOBER 2012

Walter E. Washington Convention Center, Washington, D.C.

www.ausa.org | abrody@ausa.org | 703-907-2665

ity with its ROK Army partners is critical to its mission as it leads the Army in its execution of fully integrated, combined live, virtual and constructive training.

The 19th Expeditionary Sustainment Command serves as the logistics support arm for Eighth Army with the mission of sustaining combat power throughout the Korean Peninsula. The 35th Air Defense Artillery Brigade provides Patriot and Avenger air defense coverage over Combined Forces Command-designated assets throughout the Peninsula. The 65th Medical Brigade serves as the strategic link to continental U.S.-based medical assets and provides medical support at the operational and tactical levels through the early stages of conflict. The 501st Military Intelligence Brigade provides combat information and multidiscipline intelligence to joint and combined warfighters from remote locations throughout Korea. Finally, the 1st Signal Brigade provides strategic and tactical communications support through fixed tactical voice and wide-area networking, and message center, tactical data, and satellite communications.

The Korean Service Corps Battalion is a paramilitary workforce of mission essential civilians, consisting of 16 armistice companies throughout Korea. The United Nations Command Security Battalion-Joint Security Area provides security and staffs Observation Post Ouellette in the Demilitarized Zone.

'Fight Tonight' Readiness

"Fight Tonight" is a core line of operation in the Eighth Army Campaign Plan and represents our determination to be highly trained, capable and fully partnered with our ROK allies. The motto embodies Eighth Army's focus on watchfulness and its role in deterring aggression in the region. We must be prepared to execute our mission at all times.

Vigilance and deterrence are our watchwords, and deter
rence lies in readiness. Our unique and complex missio
against a real-world threat, coupled with limited maneuve
space to maintain sustained readiness, requires blendin
live, virtual, constructive and gaming capabilities to sup
port gunnery, combined arms maneuver, wide-area secu
rity training and mission command training.

Operations in a Complex Environment

The organization and culture of Eighth Army reflect ou
history in the Pacific and the changes in the Army'
warfighting processes and experiences of the past decad
Eighth Army is preparing itself for the full range of unifie
land operations. We train to be ready across the spectrum c
conflict, to seize the initiative from any opponent under th
most challenging conditions, in some of the most rugge
and complex terrain in the world. We are able to conduc
joint and combined conventional and chemical, biologica
radiological and nuclear operations. We think and train di
ferently. We do not train exclusively to fight conventiona
forces in major combat operations but across the full spec
trum of threats and conditions.

Joint and Combined: A Special Alliance

Eighth Army is privileged to be full partners with our si
ter services and our ROK allies. The ROK-U.S. military a
liance is unique in the world. For more than 60 years, KA
TUSA soldiers—the very best in the ROK Army—hav
served within U.S. formations. This remarkable, share
commitment binds us as brothers in arms, in defense of ou
nations and the values we share as free peoples serving de
mocratically elected governments. We work hard and par
ner with a purpose to improve interoperability, and we e

During training in the Republic of Korea (ROK), soldiers from the 1st Armored Brigade Combat Team assault a position. The ROK-U.S. Alliance was forged during the Korean War; the 2nd Infantry Division is the last remaining permanently forward-stationed division in the U.S. Army.

ProQuest®

HOW IS THIS PUBLICATION THINKING ABOUT THE FUTURE?

BY BECOMING PART OF THE PAST.

We'd like to congratulate this publication for choosing to remain accessible through ProQuest, in digital and microform formats.

To preserve the past ...
start here.

www.proquest.com

Soldiers from the 2nd Infantry Division and the Republic of Korea participate in a live-fire exercise at Rodriguez Range. The two forces exercise and train together to ensure success as a fully integrated force. Eighth Army has been an enduring presence in the western Pacific since 1944.

ercise and train to succeed on the battlefield as a fully integrated force.

Regional Stability

As Eighth Army stands ready to defend the Republic of Korea, we also train and prepare to project power across the region in direct support of our allies and friends. We engage in Pacific Command and U.S. Army Pacific theater security cooperation efforts and stay ready to provide humanitarian assistance and disaster relief. We know that we embody the national will of the United States and are able to deploy when called upon to serve the range of U.S. national interests.

Soldiering in Korea Today

An assignment to Eighth Army means an opportunity for a highly rewarding experience found nowhere else in our force. The old clichés no longer apply and are replaced by today's new reality.

Eighth Army has a new mission. Soldiers in Eighth Army train for a full range of contingency operations. Our soldiers do more than counterinsurgency; they conduct high-intensity offensive maneuver, combat gunnery and combined training with our Korean partners.

The Republic of Korea is a prospering, progressive nation. It ...ms that everything in Korea is new and contemporary. ...orea is one of the most modern countries in the world and boasts a sophisticated infrastructure comparable with th... of Europe and the United States.

Families enjoy Korea. The quality of life here is absolutel... satisfying. From shopping, historical sites and outdoor recr... ation to travel opportunities across this vibrant region, Kore... has it all for both single soldiers and families. Korea's ga... risons are making major upgrades, and the Korean econom... makes daily life an interesting and enjoyable experience.

Katchi Kapshida: 'We Go Together'

Eighth Army continues to challenge its soldiers to d... velop their warfighting skills in a combined and joint env... ronment by providing the best training opportunity in As... and a chance to build and nurture friendships with ou... ROK allies. Our Good Neighbor Program is buildin... bridges throughout Korea with service projects, exchange... competitions, concerts, festivals and teaching opportun... ties. In 2011, soldiers from the 2nd Infantry Division partic... pated in a massive cleanup effort after record floods swe... through the Peninsula last fall. In addition, our soldie... routinely participate in service projects benefiting th... homeless, orphans and otherwise needy Korean citizen... These efforts solidify Eighth Army's commitment to the R... public of Korea and, consequently, make the strongest a... liance in the world even stronger.

We are America's boots on the ground in Asia, and whe... Eighth Army stands, freedom is secure. *Katchi Kapshida!*

U.S. Army South: Shaping the Environment And Building Relationships

By MG Simeon G. Trombitas
Commanding General, U.S. Army South

For more than 100 years, U.S. Army South, as the Army service component command for U.S. Southern Command (SOUTHCOM), has been at the forefront of the Army's three principal and interconnected roles: Prevent conflict, shape the environment and decisively win our nation's wars. From supporting operations such as Just Cause in Panama in 1989 to Unified Response in 2010, Army South has been a pioneer in successfully shaping the environment and conducting operations in our area of responsibility (AOR).

As a result of effectively transforming to the theater Army organization, which began in October 2006, and successfully deploying the contingency command post to Haiti in 2010 for Operation Unified Re-

Soldiers salute during the closing ceremony for Beyond the Horizon (BTH) Honduras 2012, held at Forward Operating Base Naco, Honduras, in June. The Army South-led exercise deploys military engineers and medical professionals to Honduras for training, while providing services to rural communities there.

sponse, our command has been operationally tested and is structured and aligned for the Army Force of 2020.

As we move toward the Army Force of 2020, Army South will be leaner and more agile, and we will continue to have the capability and flexibility to meet today's challenges and tomorrow's uncertain conflicts. Not only have our recent successes and our structure alignment ensured that we are prepared for the Army Force of 2020, but we are strategically aligned to meet the needs of the combatant commander as part of Joint Force 2020.

Since 1904 Army South has been successfully working with and developing partners. In doing so, we are helping to build capacity in our AOR, thus making us pioneers for the rest of the Army and for the 38th Chief of Staff of the Army's (CSA) vision of "America's Force of Decisive Ac tion." Our AOR now encompasses 31 countries and 15 ar eas of special sovereignty in Central and South Americ and the Caribbean and covers roughly 15.6 million squar miles.

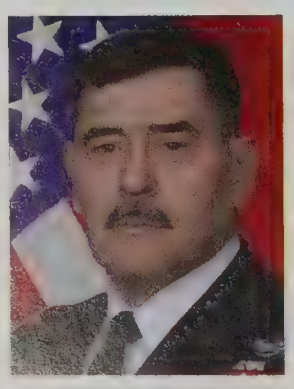
Today we are conducting operations, multinationa training exercises, bilateral staff talks, subject-matter ex changes and key leader engagements with partner nations all of which ensure access that is necessary to strengthe security in the region while meeting leadership's main ob jective of shaping the environment.

Building Partner-Nation Capacity

SOUTHCOM and Army South joined with other partne nations this year to support Operation *Martillo* (Hammer This international operation of European and Wester Hemisphere partner nations targets illicit trafficking route in coastal waters along the Central American isthmus. Na tions throughout Central and South America and th Caribbean joined this important operation to improve se curity in our hemisphere.

Operation *Martillo* is designed to counter the rise c transnational criminal organizations that are on the rise i the Western Hemisphere. Their power, range and influenc over illicit drugs and human trafficking have become mor than individual nation-states' law enforcement can handl In response, leaders of the region have joined together t counter transnational organized crime (CTOC).

CTOC is a critical component of the U.S. government' coordinated interagency regional security strategy to den these criminal organizations the ability to exploit trans shipment routes for the movement of narcotics, precurso chemicals, bulk cash, weapons, people and terrorists alon



***MG Simeon G. Trombitas** is the commanding general of U.S. Army South. His previous assignment was special assistant to the commanding general, U.S. Army Special Operations Command, Fort Bragg, N.C. He served in the 7th Special Forces Group (Airborne) as a detachment commander, company commander, battalion operations officer, executive officer and battalion commander. His joint assignments include deputy director of operations, J-3, Special Operations Command South, Panama; commander, U.S. Military Group-Colombia; and chief, Regional Special Operations Division, J-3, The Joint Staff, Washington, D.C. He has also served as commanding general of Special Operations Command, Korea, and the Iraq National Counterterrorism Force Transition Team during Operation Iraqi Freedom. A graduate of the U.S. Military Academy at West Point, he has a master's degree from the Army War College.*

A UH-60 Black Hawk helicopter assigned to 1st Battalion, 228th Aviation Regiment, out of Soto Cano Air Base, Honduras, lifts off shortly after the BTH closing ceremony. The four-month BTH is part of U.S. Southern Command's annual humanitarian and civic assistance program.

hipping routes. Successfully bringing partner nations to-ether for this operation is attributed to the years Army outh and SOUTHCOM have spent building partners in ne region.

Enhancing Hemispheric Security

Our robust staff talks program with ne armies of Brazil, Chile, Colombia nd El Salvador plays a vital role in haping the environment and build-ng partner capacity and strong rela-ionships. Army South is one of the nly Army component commands to ead bilateral staff talks on behalf of ne CSA.

The program provides bilateral fo-ums to discuss mutual strategic objec-ves with partner nations and helps the ommand and the Army assist our artner nations in developing a road ap for the future. Strengthening the elationship with partner-nation armies rough these talks and the resulting greements have lasting effects on se-urity and stability throughout the emisphere.

As a deployable headquarters, Army outh is prepared to conduct full-scale ontingency operations, migration upport and humanitarian missions roughout the SOUTHCOM AOR as nvisioned by the CSA. Each year rough exercises such as *Fuerzas Ali-*

adas Humanitarias (Allied Humanitarian Forces-FAHUM), we partner with military and civilian organizations in our AOR to train and prepare for natural disasters and humanitarian assistance. This year, Army South partnered with 27 nations and five government and nongovernment organizations during the FAHUM 2012 exercise, which was hosted by El Salvador and bolstered partner-nation capacity to respond to disasters and improve the interoperability and effectiveness of civilian and designated military critical responders.

Another exercise is Peacekeeping Operations-Americas (PKO-A), the Army's primary peacekeeping training event in the Central and South American region. PKO-A 2012 took place in Chile and the Dominican Republic and provided a forum for militaries of the region, civilian agencies, and nongovernment and government organizations from 17 nations to build valuable professional relationships, promote alliances and regional relations, and reinforce security cooperation.

In addition to the FAHUM and PKO-A exercises, Army South participated in Allied Forces PANAMAX, the largest annual multinational exercise held in our AOR. PANAMAX 2012 brought nations together throughout the West-

Soldiers of Headquarters Support Company, U.S. Army South, practice proper use and handling of the M2 .50-caliber machine gun during a Sergeants Time Training at the command's headquarters in San Antonio, Texas, in April.

SGT Javaris M. Cooper (right), a signal intelligence analyst with the 470th Military Intelligence Brigade, and SGT Matthew G. Baker, an internment/resettlement specialist with the 525th Military Police Battalion, were the winners in the U.S. Army South Best Warrior Competition in June.

ern Hemisphere to train for the defense of the Panama Canal. The exercise facilitated interoperability and provided a venue to share best practices among the military and security forces in the region. Demonstrating the progress of our partners in the region, Colombia led a combined staff as the land component command for this multinational exercise for the second year in a row.

The Beyond the Horizon (BTH) series of exercises is another activity critical to developing partner-nation capacity and shaping the environment. This exercise also provides U.S. forces the opportunity to train in the region with partner armies. BTH is part of SOUTHCOM's annual humanitarian and civic assistance program and includes more than 2,400 U.S. servicemembers, the majority from our reserve component, deploying to remote locations in Central America and the Caribbean to provide medical, dental and engineering support.

Army South has planned and conducted BTHs and similar training exercises for more than 30 years. During each four-month BTH exercise several smaller events called medical readiness training exercises take place, in which teams of military medical, dental or veterinary professionals work in austere areas to gain valuable in-theater training, while also providing medical services to people (and their farm animals) in need of treatment. The BTH series of exercises has provided care to hundreds of thousands of people and built or renovated dozens of facilities in the SOUTHCOM AOR.

This year Army South conducted BTH exercises in Guatemala and Honduras and supported the U.S. joint forces New Horizons exercise in Peru. Our soldiers conducted seven medical and dental readiness training exercises, resulting in the treatment of more than 61,000 patients. Our forces, working with the host nation forces in 2012, built or renovated six schools and five health clinics. Our forces also provided valuable training to first responders and disaster managers.

BTHs are an important tool in achieving the CSA's vision of shaping the environment and building partner-nation capacity. For example, exercises this year were conducted in vital areas where the Guatemalan government is actively fighting transnational criminal organizations. By helping Guatemala bring services to these areas, security is strengthened.

Successfully Tested Forces in the Region

Such exercises allow Army South to maintain readiness to conduct contingency missions such as our participation in Operation Unified Response in 2010. Last year Army South received the Army Superior Unit Award for its performance and deployment during this operation in response to the devastating 7.0-magnitude earthquake that struck Haiti.

Army South deployed its contingency command post with more than 280 soldiers and civilians successfully executing a relief-in-place and assuming command of Joint Task Force-Haiti in support of U.S. government efforts in that country. We have taken the lessons learned from this deployment and applied them during our robust exercise schedule.

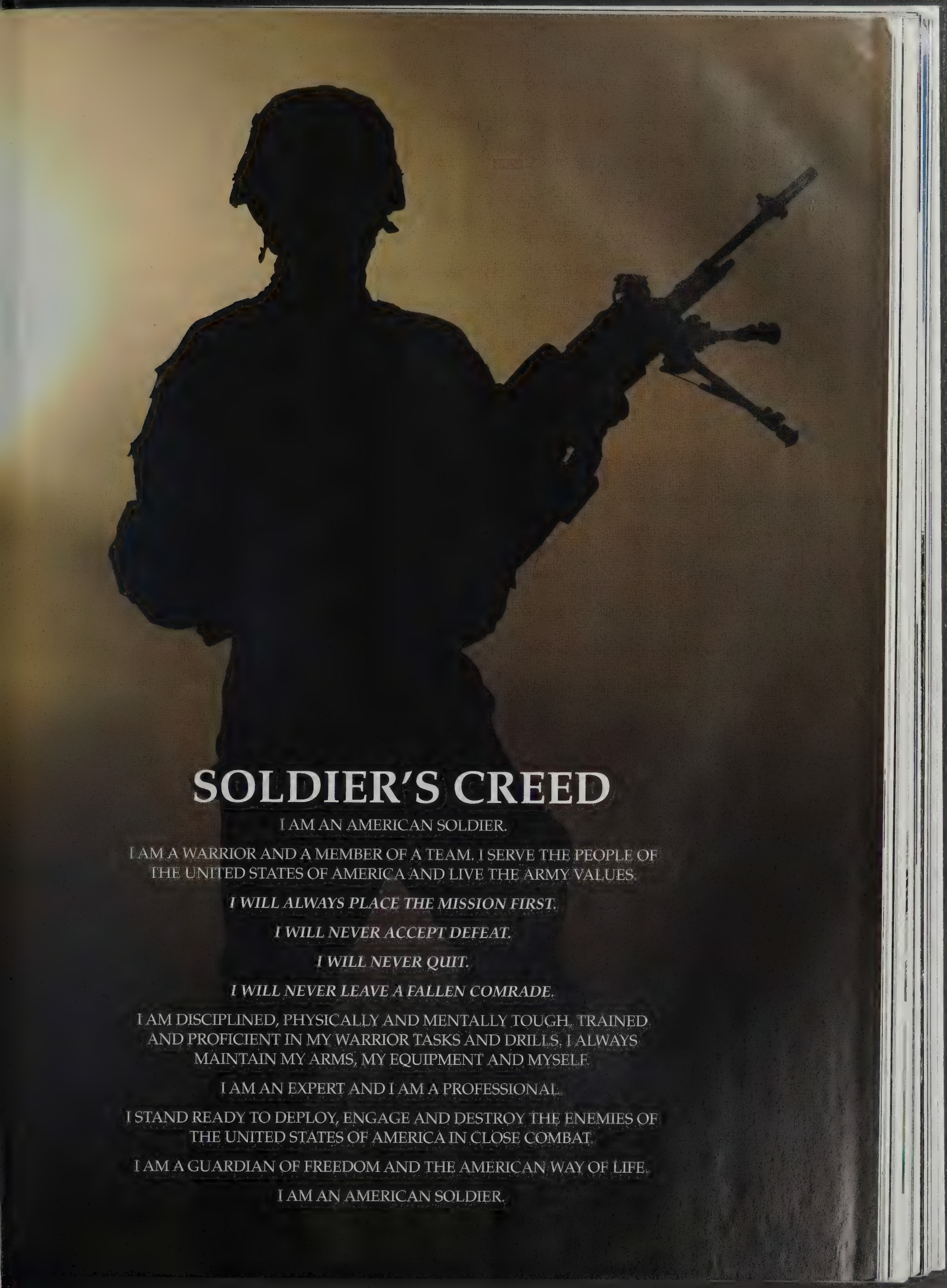
In addition to the exercises and theater operations, Army South—working with SOUTHCOM—has forces stationed in Honduras as part of Joint Task Force Bravo and in Cuba as part of Joint Task Force Guantanamo. These forces, including the 1-228th Aviation Battalion and the 525th Military Police Battalion, assist in supporting exercises, operations, security and various theater missions.

Ready Today, Prepared for Tomorrow

Army South is at the forefront of shaping the environment, building partner-nation capacity and being a decisive Army component command for SOUTHCOM and the U.S. Army.

Army South's design and capabilities align with the future envisioned by our leaders as part of the Army of 2020 and Joint Force 2020. As a result, we are prepared to perform all missions expected of the soldier of today and tomorrow.

Defense and Fraternity!



SOLDIER'S CREED

I AM AN AMERICAN SOLDIER.

I AM A WARRIOR AND A MEMBER OF A TEAM. I SERVE THE PEOPLE OF THE UNITED STATES OF AMERICA AND LIVE THE ARMY VALUES.

I WILL ALWAYS PLACE THE MISSION FIRST.

I WILL NEVER ACCEPT DEFEAT.

I WILL NEVER QUIT.

I WILL NEVER LEAVE A FALLEN COMRADE.

I AM DISCIPLINED, PHYSICALLY AND MENTALLY TOUGH, TRAINED AND PROFICIENT IN MY WARRIOR TASKS AND DRILLS. I ALWAYS MAINTAIN MY ARMS, MY EQUIPMENT AND MYSELF.

I AM AN EXPERT AND I AM A PROFESSIONAL.

I STAND READY TO DEPLOY, ENGAGE AND DESTROY THE ENEMIES OF THE UNITED STATES OF AMERICA IN CLOSE COMBAT.

I AM A GUARDIAN OF FREEDOM AND THE AMERICAN WAY OF LIFE.

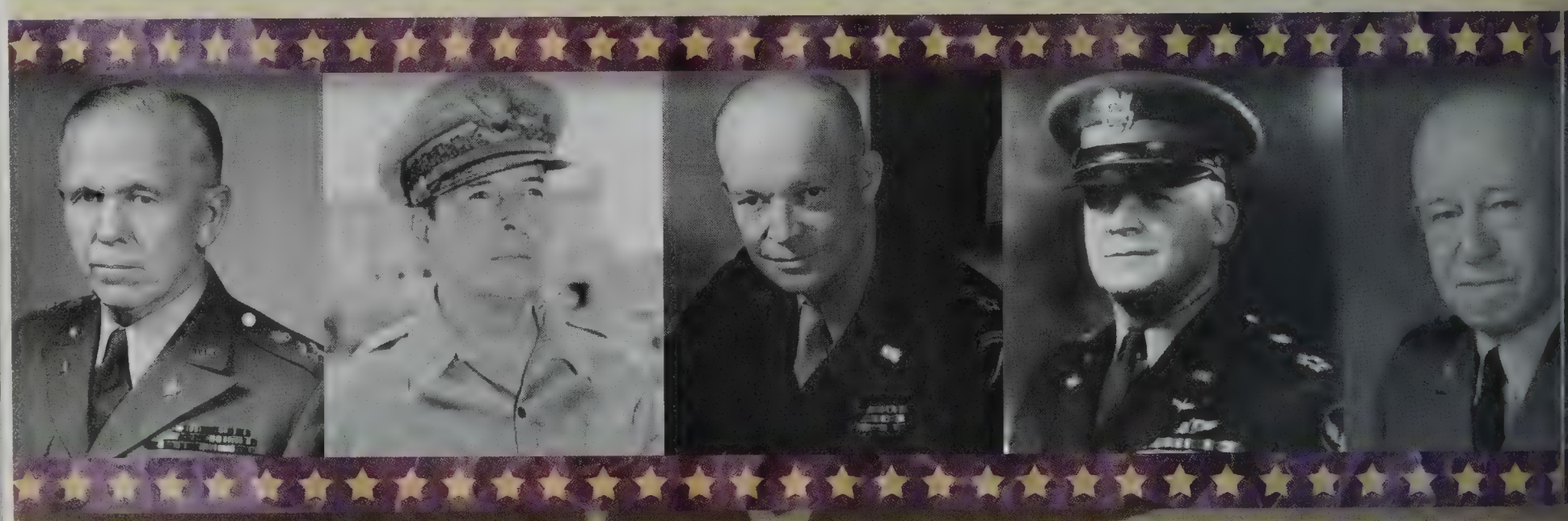
I AM AN AMERICAN SOLDIER.

THEY WERE THE GREATEST LEADERS OF THE GREATEST GENERATION

The Five–Star Generals from World War II dedicated their lives and legacies to our country.

IN 2013 YOU CAN PURCHASE U.S. MINTED COMMEMORATIVE COINS AND A BOOK CELEBRATING THEIR LEGACY.

The CGSC Foundation announces the 2013 publication of *The Five-Star Generals of Fort Leavenworth* (working title), edited by Dr. Jim Willbanks, Director of the Department of Military History, U.S. Army Command and General Staff College, and published by University Press of Kentucky. **Log on to fivestargenerals.org for more information** and we'll notify you when book sales begin. We anticipate book sales to begin in March 2013.



GEORGE MARSHALL · DOUGLAS MACARTHUR · DWIGHT EISENHOWER · HENRY ARNOLD · OMAR BRAD

AVAILABLE IN 2013, THE UNITED STATES GOVERNMENT IS OFFERING FOR SALE LIMITED PRODUCTION COMMEMORATIVE COINS.

The coins – a five-dollar gold, one-dollar silver and half-dollar clad coin – are currently in the design phase at the U.S. Mint. Your investment in these tangible symbols of American history is also an investment in the future. Surcharges from the sales of these coins will benefit the CGSC Foundation, enabling us to continue providing the *Margin of Excellence* to the U.S. Army Command and General Staff College.

Log on to fivestargenerals.org for more information and to be notified when coins are available.

TO BE ADDED TO THE COIN AND BOOK LIST.

U.S. Army Africa
Leading the Army of the Future

By MG David R. Hogg*
Commanding General, U.S. Army Africa

To meet the security challenges of the 21st century, the U.S. Army must remain prepared, responsive and adaptable. As U.S. Africa Command's Army service component, U.S. Army Africa (USARAF) has evolved into an organization that supports U.S. national strategic interests in Africa by ensuring that U.S. citizens are protected from established and emerging threats. We are not alone in this endeavor; our African counterparts share our common vision of partnership, cooperation and security.

*MG Patrick Donahue assumed command of U.S. Army Africa in August. MG Hogg has been appointed to the rank of lieutenant general and assignment as the U.S. Military Representative to the NATO Military Committee.

USARAF began 2012 with the signing of Department of the Army General Order 2012-04-AS, a significant accomplishment after more than three years of hard work. With that order, U.S. Army Southern European Task Force (SETAF) was officially redesignated USARAF/SETAF and further desig-

SGT Victor Aguirre (rear), 509th Signal Battalion, observes SPC James Lagerstrom adjusting cables on a satellite terminal, an element of the Early Entry Command Post and Forward Command Post solutions utilized by U.S. Army Africa.

nated as an Army service component command (ASCC), heir to Ninth U.S. Army's lineage, fitting us fully within the Army's evolving structure for units above the division level.

Across Africa, the diversity and complexity of the security environment are apparent—from fragile economies to violent extremism. In East Africa, African security forces continue to combat the Lord's Resistance Army (LRA), a terrorist group that has used the tactics of coercion, torture, murder and the recruitment of child soldiers to achieve its extremist ideals for more than two decades. Although significant advances have been made in weakening the LRA, it continues to use the dense jungle terrain near the borders of the Democratic Republic of Congo, South Sudan, Uganda and the Central African Republic as cover for its operations. We will continue to build military-to-military relationships and support international efforts to achieve peaceful conflict resolution between South Sudan and Sudan. We also maintain a vigilant eye on terrorist organizations such as al Qaeda in the Maghreb, Boko Haram and other transnational criminal threats by supporting regional counterterrorism initiatives throughout the Trans-Sahel.

When the Arab Spring protests began in Tunisia in December 2010, they sparked a wave of unrest that swept across Northern Africa, culminating in the fall of Libya's Moammar Gadhafi. USARAF was called upon to participate in Joint Task Force-Odyssey Dawn, which provided operational and tactical command and control for emergency evacuations, humanitarian relief and follow-on missions in support of the international response. USARAF also led Joint Task Force-Odyssey Guard, which supported the reestablishment of the U.S. Embassy in Tripoli. In October 2011, USARAF conducted an aeromedical evacuation of wounded Libyans from Tripoli to Europe and Boston, Mass.

***MG David R. Hogg** became the commanding general, U.S. Army Africa, in June 2010. His leadership assignments include assistant division commander-support, 1st Armored Division, Germany, and commanding general, Seventh U.S. Army, Joint Multinational Training Command. He previously served as the deputy commanding general, Combined Security Transition Command-Afghanistan. He was commissioned as an Armor officer upon graduation from the U.S. Military Academy and holds master's degrees in military art and science and in national security strategy.*

USARAF established the Joint Task Force at its command contingency post in August 2011 and conducted 24-hour operations through the first week of January 2012.

Military exercises are essential in building partner capacity, and we continue to refine our exercise programs to ensure that they are mutually supporting and meet U.S. and partner-nation training requirements. To gain the benefits of regional cooperation, we organized our Accord series into regionally focused exercises. In February, U.S. Army Africa conducted Atlas Accord 2012 in Mali, a joint aerial resupply exercise designed to help Malian defense forces increase their ability to support humanitarian assistance and disaster-relief operations. In August, the Botswanians hosted Southern Accord 2012, designed to enhance their ability to respond to crises. We conducted several medical accord exercises as well as smaller medical readiness training exercises throughout the continent. These training events provide our soldiers with unique opportunities to instruct as well as to learn. As a task force liaison officer, a captain from the Mississippi National Guard, said after working side-by-side with members of the Gabonese military during Medical Accord 2012 in Libreville, Gabon: "It's not us teaching them—we are learning from each other because they are bringing something to the table." (National Guard and Reserve units support our mission accomplishment because U.S. Army Africa does not maintain permanently assigned forces.)

To respond to a direct threat to U.S. citizens, USARAF is prepared to form and deploy a joint task force able to plan contingency operations, including noncombatant evacuation operations. To remain proficient, USARAF participates in U.S. Africa Command's annual Judicious Response exercise, which streamlines our ability to deploy the joint task force headquarters. As part of our responsibilities as an ASCC, we also provide Title 10 support to the other services operating in Africa.

USA's *Institute of Land Warfare* invites you to

GIVE VOICE TO YOUR KNOWLEDGE

The Association of the United States Army's professional education program is designed to identify, discuss and influence the outcome of significant issues that affect the U.S. Army and national defense. AUSA's Institute of Land Warfare (ILW) accomplishes this goal through the sponsorship of writing programs, for which quality manuscripts are needed.

ILW would like to invite you—past and present servicemembers, Army civilians, friends of the Army and others with an interest in and knowledge of national defense—to submit a manuscript to one or more of our writing programs. Membership in AUSA, while always encouraged, is not a requirement for participation.

CALL *for* MANUSCRIPTS

For important information on the Institute of Land Warfare writing program, categories and submission guidelines, please visit http://www.ausa.org/publications/ilw/Pages/WritingProgram.aspx.

ASSOCIATION OF THE UNITED STATES ARMY · AUSA

THE INSTITUTE OF LAND WARFARE · AUSA ·

As we learned at the ASCC commanders' panel discussion at last year's Association of the U.S. Army's Annual Meeting and Exposition, USARAF accomplishes its mission as do other ASCCs—through security cooperation. Our primary focus is on peacetime engagements, forging defense relationships in support of specific U.S. security interests, building partner capacity and ensuring strategic access. To that end, we continue our robust senior leader engagement program, with more than 30 engagements slated for fiscal year 2012. In addition, we also conduct hundreds of military-to-military events focused on leadership development, intelligence sharing and capacity building.

As with other ASCCs, challenges are usually transnational in nature. In Africa, the adversary has no respect for borders or national sovereignty; defeating the adversary, therefore, requires a regional approach and a long-term commitment. USARAF supports regional efforts by working with regional stand-by forces to build their capacity to combat transnational criminal organizations. We also work with the Department of State on programs such as Africa Contingency Operations Training and Assistance and the Africa Deployment Assistance Program Training (ADAPT). We expect to complete or provide support to nine ADAPT events, 188 military-to-military engagements, eight Army-led exercises, 10 U.S. Africa Command exercises and four humanitarian mine assistance missions on the continent by the end of fiscal year 2012.

With the theme "The Strength of an Army for a Nation and Its People," USARAF and Uganda cohosted the second biennial African Land Forces Summit this May in Kampala, Uganda. The summit—attended by leaders from 35 nations, many of whom had never met before—provided a unique forum for frank and open discussion on the challenges leaders face in balancing priorities within today's security environment, while also providing the chance for leaders to share solutions on how they have successfully addressed those challenges. It was also an opportunity for African land forces commanders to share lessons learned for strengthening institutional capacity, as many confront similar challenges in creating land forces that are increasingly proficient, professional and accountable.

In building upon these successes in an increasingly constrained resource environment, we continue to find creative solutions to complex issues. In fiscal year 2013, a brigade will be aligned with U.S. Africa Command in support of its theater security-cooperation mission. The unit maintains its decisive action capabilities but also receives language, regional expertise and cultural training to prepare it to meet its training and mentoring mission. Soldiers deploy as small units to points in Africa where they will train and mentor African soldiers. They are organized under a single chain of command responsible for training and administrative support. Before their deployment, U.S. Forces Command will have administrative control over the brigade. During deployment, operational control will fall to U.S. Africa Command and USARAF until they return to home station.

The alignment of this brigade to U.S. Africa Command marks the start of a broader concept of regional alignment of Army forces. Not limited to the U.S. Africa Command, this concept represents an expanded approach to the Army security-cooperation mission and force-management process. Regional alignment will allow the Army to become familiar with the regions in which they may be tasked to operate. As a total force concept, regional alignment will capitalize on the strengths of active and reserve component forces. Regional alignment of U.S. forces also increases flexibility, deployability and combat readiness. USARAF is excited to be an integral part of the first brigade to be employed as part of the U.S. Army's regionally aligned forces concept.

As USARAF evolves, we continue to provide support to our partners—joint, regional, interagency and multinational—in finding new, more efficient ways of doing business. We will work to build enduring relationships at all levels—soldiers and leaders—through direct and personal engagement. By working with our African partners, we gain a better understanding of the diverse perspectives, competing priorities and unlimited opportunity that shape the continent's complex and unique environment. In today's security world, strong partnerships based on trust are essential. We will work to forge that trust and be a leader for the Army now and into the future. ★

SFC Grady Hyatt (center) with U.S. Army Africa, leads an after-action review with soldiers of the army of Ghana. In March 2013, the Army will align the 2nd Brigade Combat Team, 1st Infantry Division, with U.S. Africa Command, where it will serve for a year as the command's go-to force.

Representing the Army And DoD in the U.S. Capital

By MG Michael S. Linnington
Commanding General, U.S. Army Military District of Washington
and
Commander, Joint Force Headquarters-National Capital Region

The U.S. Army Military District of Washington (MDW) has answered the call to duty in many, varied ways since its establishment in 1921. Initially it was named as the District of Washington, later as the 16th Brigade, then the Washington Provisional Brigade, and finally, in May 1942, as the Military District of Washington.

A direct reporting unit to the Chief of Staff of the Army, MDW was further designated as a dual mission command in 2003 and now serves as the core staff element of a U.S. Northern Command-designated Joint Force Headquarters-National Capital Region (JFHQ-NCR) established in response to the 9/11 attacks. Today, the command's combined mission is to plan, coordinate, maintain situational awareness and partner in the employment of forces

SFC Alfred Lanier, Sergeant of the Guard, Tomb of the Unknowns, lays a rose in remembrance. Sentinels at the tomb are members of the 3rd U.S. Infantry Regiment (The Old Guard).

as a joint task force (JTF) to conduct homeland defense and civil support operations in the National Capital Region (NCR) to mitigate regional challenges.

The command continues to sustain its traditional Army mission to provide executive, operational, ceremonial and musical support across a full spectrum of worldwide responsibilities to support our nation's leaders. The men and women of the MDW are firmly integrated into the mosaic of the nation's capital activities, serving as standard bearers for the Department of the Army and the Department of Defense, from guarding the Tomb of the Unknowns at Arlington National Cemetery to civil support operations during National Special Security Events (NSSE).

To date, JFHQ-NCR/MDW has been activated as a Joint Task Force 21 times: 17 during NSSEs including yearly State of the Union addresses (since 2003), the state funerals of Presidents Reagan (2004) and Ford (2007), the 2008 G20 meeting, the 2010 Nuclear Security Summit and two presidential inaugurations.

As DoD prepares for the 2013 presidential inauguration, the commander, U.S. Northern Command, has been assigned the broad mission of providing military ceremonial support and civil support missions, as requested by the primary federal agency and approved by DoD. U.S. Northern Command, in turn, delegated that authority to Joint Task Force-National Capital Region (JTF-NCR). In April, the JTF-NCR was activated as a functional JTF to plan and prepare for the 2013 inauguration. Unlike previous years, howeve there will be no armed forces inaugural committee to mar age this task. As a result of lessons learned from previous in augurations and as good stewards of finite resources, th JTF-NCR will assume this role much as it does for other na tionally significant events in the nation's capital.

Through minimal augmentation, the historical DoD sup port to the presidential inauguration will remain unchange and will continue to encompass military ceremonial suppo to the opening ceremony, swearing-in ceremony, the inau gural parade and numerous official inaugural balls. Th JTF-NCR will coordinate and command Title 10 militar support for the presidential inaugural committee. This in cludes organizing, staging, assembling and executing the in augural parade that features nearly 2,000 military an 10,000 civilian participants.

Simultaneously, the joint force headquarters will sustai situational awareness and employ forces as a joint task forc for civil support operations. The command operates in th assigned geographic area of the National Capital Regio which includes six counties in Virginia and Maryland a well as the District of Columbia. This complex region en compasses a diverse group of local, state and federal juris dictions with a distinctive set of needs and interests, and also home to infrastructure that is both critical and symbol to our nation. The command serves as a vital component t any emergency response in the National Capital Region an represents the nation and the Department of Defense on th most public and sensitive stages.

Highlighting the command's preparedness and en gagement efforts is a capstone emergency manage ment exercise called Capital Shield. This exercise fa cilitates the interoperability and collaboration amon JFHQ-NCR/MDW and all service components, th National Guard, Joint Task Force National Capital Regio Medical (JTF-CapMed) and our regional interagency par ners to develop protocols and partnerships that can be mu tually used during a crisis or national security event.

The U.S. Army Band (USAB), Pershing's Own, is a majo subordinate command of MDW. The nearly 270 soldier-mu sicians of Pershing's Own have maintained a tradition of ex cellence as the premier musical organization of the U.S Army. The band was founded in 1922 by Army Chief o Staff GEN John J. (Black Jack) Pershing with the primar mission to support military funerals in Arlington Nationa Cemetery. USAB also supports wreath-laying ceremonie for visiting dignitaries at the Tomb of the Unknowns, arriva and departure ceremonies at the White House and the Pen tagon, and monthly retirement parades and special review at Joint Base Myer-Henderson Hall. In all, USAB perform more than 5,000 missions annually. While the bulk of i missions support memorial activities at Arlington Nationa Cemetery, USAB is taking on even greater responsibilitie for public diplomacy and Army outreach.

During the past year, to meet emerging mission require ments, USAB formed two new performing elements. "Arm

MG Michael S. Linnington *serves as the commanding general, U.S. Army Military District of Washington/Commander, Joint Force Headquarters-National Capital Region. A graduate of the U.S. Military Academy in 1980, he has held assignments in Germany, the Republic of Korea, and on both the Army and Joint Staffs in the Pentagon. He commanded the 3rd Brigade, 101st Airborne Division (AASLT), where he deployed both in Operation Enduring Freedom and Operation Iraqi Freedom. Most recently, he was deployed during Operation Enduring Freedom on the International Security Assistance Force Joint Command staff in Kabul, Afghanistan, as the J5 and later as deputy chief of staff for Plans and Projects.*

The U.S. Army Band (Pershing's Own) celebrates its 90th anniversary with a special performance in March at the Music Center at Strathmore, North Bethesda, Md.

Voices" is a nine-soldier vocal group able to support events sponsored by senior DoD and Army leaders as well as a wide range of other events. The U.S. Army Woodwind Quintet plays a vital role in outreach to schools and universities while providing support to numerous protocol events in the National Capital Region.

Notable in the past year has been the growth in the use of USAB as a public diplomacy tool. Pershing's Own hosted a groundbreaking series of joint concerts with the Military Band of the People's Liberation Army of China in Washington, D.C., Philadelphia, Pa., and New York, N.Y., and were featured performers in this year's Norwegian Military Tattoo. These international outreach missions are accompanied by an increasingly important effort to tell the Army's story of the last 237 years to the American people by innovative use of "in-reach," whereby USAB hosts groups of students and important influencers at the band's training facility.

Pershing's Own will also play a significant role in the presidential inauguration. Since the inauguration of Calvin Coolidge in 1925, the U.S. Army Band has led each inaugural parade as part of the official escort to the President. Yet another ceremonial unit of the U.S. Army Band, the U.S. Army Herald Trumpets will play at the official swearing-in ceremony at the U.S. Capitol.

Another of MDW's major support commands is the 3rd U.S. Infantry Regiment, the Old Guard, the oldest active duty infantry unit in the Army, having served our nation since 1784. The Old Guard is the Army's official ceremonial unit and escort to the President of the United States. In that capacity, its soldiers are responsible for conducting memorial affairs missions and official military ceremonies at the White House, the Pentagon, national memorials and elsewhere in the nation's capital.

The Old Guard is composed of two infantry battalions and a separate support company. Specialty elements of the 3rd U.S. Infantry Regiment include the U.S. Army Drill Team; the U.S. Army Caisson Platoon; the Tomb Guard Platoon, whose members serve as sentinels at the Tomb of the Unknowns; the Old Guard Fife and Drum Corps; the Commander-in-Chief's Guard; the Continental Color Guard; and the Presidential Salute Battery.

Today, the Old Guard is more than 1,600 soldiers strong and continues its solemn duty of conducting memorial affairs daily in Arlington National Cemetery as well as maintaining a 24-hour vigil at the Tomb of the Unknowns. The Old Guard conducts an average of 14–20 funerals each day in Arlington National Cemetery and also conducts the dignified return of remains of our nation's fallen heroes to the continental United States at Dover Air Force Base, Del.

Personnel from the Army Liaison Team-Medical Evacuation to CONUS Hospitals are assigned to the JFHQ-NCR/MDW and represent our Army when our sick, ill, injured and wounded return to the United States at Joint Base Andrews, Md. This team of dedicated professionals provides continuous visibility of patient transitions from Europe, Asia and Africa to designated medical treatment facilities stateside. As of March, they have met a total of 1,279 flights, assisted more than 40,000 servicemembers (all branches) and distributed more than $1,422,000 in Army emergency relief funds.

The U.S. Army Air Operations Group (AAOG) was established in 2005 as MDW's brigade-level aviation command. The AAOG employs global fixed-wing, regional rotary-wing aviation and engineer technical rescue assets to support Army leadership and national-level contingency operations within the NCR.

The AAOG's Airfield Division provides air traffic services, maintenance, airfield base operations support and airfield services to ensure safe and expeditious flow of air traffic at Fort Belvoir, Va., and the Pentagon helipad. An Office of the Secretary of Defense administrative instruction is pending publication in late 2012/early 2013 that will codify and expand the AAOG's responsibilities for the operation and management of the Pentagon heliport.

The AAOG's 12th Aviation Battalion is located at Davison Army Airfield, Va., and operates 16 UH-60 and VH-60 Black Hawk and eight UH-72 helicopters. In 2013, the 12th Aviation Battalion will receive the Army's first Blue Force Tracker (BFT)-equipped UH-72 and will subsequently initiate retrofit of other aircraft to incorporate a BFT capability. Other modernization efforts include the fielding of four

Soldiers of the 911th Technical Rescue Engineer Company, 12th Aviation Battalion, practice urban search-and-rescue techniques at the annual Capital Shield Exercise in Lorton, Va.

black and gold VH-60M executive transport helicopters and the Crashworthy External Fuel System, which will significantly increase the range and endurance of the UH-60 fleet.

The 12th Aviation Battalion's 911th Technical Rescue Engineer Company is located at Fort Belvoir, Va. The 911th is the only DoD unit equipped and trained as an urban search-and-rescue heavy task force with a collapsed structure exploitation capability. The 911th recently incorporated MDW military police search-and-rescue dogs (Belgian Malinois) to enhance their ability to rapidly locate victims in collapsed structures.

The U.S. Army Priority Air Transport (USAPAT) Command Battalion, a nominative unit, was recently identified as a centralized selection list battalion command. The unit operates two Gulfstream C-37As (Gulfstream V), one C-37B (Gulfstream G550) and three UC-35B Cessna Citation Encores based at Joint Base Andrews. These aircraft provide the Army's senior leadership with a global transport capability. Recent improvements include the addition of expanded wide-band secure communications that improve secure Unclassified but Sensitive Internet Protocol Router Network and Secret Internet Protocol Routing Network, secure video teleconferencing, and secure telephone capability to the C-37 fleet. This effort significantly enhances the Secretary and Chief of Staff of the Army's ability to communicate with the National Command Authority and forces in the field while traveling.

USAPAT's two overseas detachments are located at Joint Base Pearl Harbor-Hickam, Hawaii, and Ramstein Air Base, Germany, and provide dedicated forward-stationed executive transport to the Army Pacific and European commands. The Pacific and European flight detachments are routinely deployed to Afghanistan for extended rotations in direct support of the International Security Assistance Force (ISAF) commander. These aircraft enable battlefield circulation for the ISAF commander and his staff throughout Afghanistan and other countries in the region.

Also within MDW, the White House Transportation Agency continues its vital mission of providing transportation services to the President, the White House staff and offi cial visitors of the First Family in the Washington, D.C., area The agency also provides transportation support for presi dential motorcades and overseas travel as directed by th White House Military Office.

JFHQ-NCR/MDW supports two other significant mis sions. The first is to provide administrative control of th Joint Explosive Ordnance Disposal (JEOD) Very Importar Persons Protection Support Activity, providing JEOD sup port to the U.S. Secret Service and Department of State. Th second is to work military dog support for drug interdic tion, bomb detection and human searches for disaster oper ations. These tasks round out a very diverse safety and secu rity role for the command.

No matter where MDW assets serve around the world, is MDW soldiers' support of Army outreach that continue to represent and inspire the rest of America.

When visiting our nation's capital during the sum mer, be sure to plan for your family to share Wednesday evening watching the U.S. Army Tw light Tattoo performed at Joint Base Myer-Hende son Hall in Arlington, Va. The Tattoo is a time-hor ored tradition that blends the precision and discipline of th 3rd U.S. Infantry Regiment (The Old Guard) with the or chestral sounds of the U.S. Army Band into a colorful per formance telling the Army's story.

For more than 30 years, MDW has taken the Army' Spirit of America performance to American cities. Thi show illustrates the story of Army history through the eye of the American soldier and is one of the Army's larges community outreach events. Since its inception, hundred of thousands of people have enjoyed the patriotic shov With music, precision drill demonstrations and historica reenactments, this action-packed performance by mor than 300 active duty MDW soldiers offers inspiration an entertainment for everyone.

MDW supports the annual Army Ten-Miler, a certified 1(mile road race in Washington, D.C., at the start of the Oct(ber AUSA Annual Meeting and Exposition. With more tha 30,000 runners, it is one of the largest 10-mile races in th country. The race enhances esprit de corps, supports fitnes goals, and embraces our ties to the community throug more than 7,500 military and civilian teams competing fo race honors. Team titles, such as the Commander's Cup an the International Cup, have made the event one of the mo popular races in the country.

The MDW serves as a vital component to any emergenc response in the National Capital Region and represents th nation and the Department of Defense daily on the mo public and sensitive ceremonial stages. Whether supportin a state arrival at the White House, honoring our fallen at A lington National Cemetery or executing a National Specia Security Event as a joint task force, the command embodie the best of military ceremonial traditions while simultane ously providing unprecedented operational capability i meeting the region's security challenges.

TRICARE and Retired Pay Top Retiree Concerns

By LTG Frederick E. Vollrath
U.S. Army retired
and
SMA Kenneth O. Preston
U.S. Army retired
Cochairmen, CSA Retiree Council

Possible increases in TRICARE premiums and changes to military retired pay were the Chief of Staff of the Army (CSA) Retiree Council's top two concerns when cochairmen, retired LTG Frederick E. Vollrath and retired SMA Kenneth O. Preston, briefed the CSA, GEN Raymond T. Odierno, at the conclusion of the Council's annual meeting held at the Pentagon April 23–27. At the meeting, the Council received briefings from 18 senior Army, Department of Defense (DOD) and Department of Veterans Affairs (VA) leaders and reviewed 16 issues submitted by installation retiree councils.

The 14 members of the Council represent more than one million retirees and surviving spouses worldwide and include members retired from all three components. The 2012 Council includes seven noncommissioned

The Army Chief of Staff's Retiree Council (from left): COL (Ret.) Alphonso Knight, MAJ (Ret.) Edward Stone, COL (Ret.) Eileen Watson, CSM (Ret.) Elijah King, CSM (Ret.) Robert Henault, CW5 (Ret.) Robert Huffman, LTG (Ret.) Frederick Vollrath, MAJ (Ret.) James Cunningham, SMA (Ret.) Kenneth Preston, SFC (Ret.) Susan Woods, SGM (Ret.) David Stewart, CSM (Ret.) William Hoffer, CSM (Ret.) Jackie Moore and COL (Ret.) Michael Molosso.

officers ranging from sergeant first class to sergeant major of the Army and seven officers ranging from chief warrant officer five to lieutenant general.

Health Care

In its report to the CSA, the Council praised ongoing health-care initiatives presented by the TRICARE Management Activity and the ongoing work of the VA to streamline the Integrated Disability Evaluation System.

In the health-care area, the Council recommended that the Army should:

■ Resist TRICARE increases. If TRICARE fees must be raised, they should not under any circumstances be tied to the annual health-care inflation rate. TRICARE fee increases must never exceed the annual percentage increase for retired pay, with special consideration given to not overburdening soldiers E-7 and below.

■ Support legislation to authorize pretax payment of TRICARE enrollment fees and premiums.

■ Expand marketing efforts to increase TRICARE Pha macy Home Delivery (TPHD) participation and cost sa ings. Consider making the use of TPHD mandatory for chr nic care prescriptions.

Communications, Retirement Services, Education

The Council appreciated the U.S. Army Installation Mar agement Command's (IMCOM) support of previous Cour cil recommendations to standardize retirement services off cer (RSO) positions and provide periodic RSO training. Th Council recommended sustaining this effort, and reviewin impacts at joint bases to ensure the transition of installatio management to other services has not adversely affected d livery of retirement services and reduced it below Arm standards.

The Council was impressed with the Army Retiremer Services Office's development of e-*Echoes*, the electron version of the Army's official newsletter for retirees and su viving spouses. The fielding of new *Echoes* applications f

***LTG Frederick E. Vollrath**, USA Ret., cochairman, CSA Retiree Council, was the deputy chief of staff, Personnel (now G-1) of Headquarters, Department of the Army; former deputy chief of staff, Personnel, U.S. Army Europe; and director of Enlisted Personnel Management, U.S. Army Personnel Command. He held other critical positions in information technology and human resource management throughout his 35 years of active duty.*

***SMA Kenneth O. Preston**, USA Ret., c chairman, CSA Retiree Council, was t 13th Sergeant Major of the Army. Prev ously, he was command sergeant major f Combined Joint Task Force-7, serving Baghdad, Iraq. He also served as comma sergeant major with 3rd Battalion, 8 Cavalry Regiment, 1st Cavalry Divisio Fort Hood, Texas; 3rd (Grey Wolf) Brigad 1st Cavalry Division, 1st Armored Division, Bad Kreuznac Germany; and V Corps in Heidelberg, Germany.*

AUSA
Membership Benefits*

Bank of America, N.A.:
AUSA Bank Card
Start receiving great rewards and show your support for AUSA. Call 866-438-6262.

Institute of Land Warfare:
ILW offers writing programs; conducts conferences and symposia; publishes essays, Defense Reports, newsletters; and provides research on defense issues. Call 800-336-4570, ext. 4630 for details.

AUSA Mastercare Group Insurance Plans:
- Active Duty & Retiree TRICARE Supplement
- Accidental Death and Dismemberment Plan
- 10-Year Level Term Life Insurance Plan
- Group Term Life Insurance Plan
- Short-Term Recovery Plan
- Long Term Care Plan

Call 800-882-5707 for more information.

Dental and Vision Discount Plans:
Discounts offered to AUSA members on dental services and vision exams. Call 800-290-0523.

This plan is not available in the states of MT and VT.

Emergency Assistance Plus:
If you or a family member gets injured or sick while on travel, this plan will provide medical assistance, bring a medical specialist or loved one to your side and much more. Call 888-633-6450 for more information.

Government Vacation Rewards:
AUSA now offers its members discounts on cruises, resorts and tour providers. Call 866-871-9181.

GEICO Insurance – Auto, Home, Condo/Renters, and Boat:
In states where available, a special member discount may apply. Call 800-861-8380.

Apple Member Purchase Program:
Apple Computers offers AUSA members a substantial savings on its computers. Call 800-MY-APPLE and mention you are a member of AUSA.

Book Program:
Members receive discounts on selected military books.

Army Times/Federal Times:
Subscription discounts on Army Times/Federal Times. Call 800-368-5718.

Dell Member Purchase Program:
AUSA members can now receive discounts on Dell PCs. Call 800-695-8133 for more information.

AUSA Career Center:
AUSA members can now post their resumes and employers can advertise any new openings they have. Visit our Web site and go to the Resources drop-down, then Career Center.

University of Maryland University College (UMUC):
University of Maryland University College (UMUC) is pleased to offer undergraduate and graduate study programs to AUSA members worldwide. For some program participants, a discounted tuition rate will apply.

Armed Forces Services Corporation:
AFSC guides you through the details on military entitlements for your retirement and survivor planning/assistance for your spouse. Call or e-mail: 888-237-2872, info@AFSC-USA.com.

Choice Hotels International®:
AUSA members can receive discounts on hotel rooms at the following hotels.
- Comfort Inn®
- Comfort Suites®
- Quality®
- Sleep Inn®
- Clarion®
- Cambria Suites®
- MainStay Suites®
- Suburban Extended Stay Hotel®
- Econo Lodge®
- Rodeway Inn®

Call 800-258-2847 and use the code 00800700.

Car Rental Program:
Use the reservation codes on the back of your membership card and save at:
- AVIS 800-331-1441
- Budget 800-455-2848
- Alamo 800-354-2322 *(rental for under age 25 available)*
- Hertz 800-654-6511
- National 800-Car-Rent

Publications:
- *ARMY* Magazine every month, including the October *ARMY Green Book*.
- *AUSA NEWS* every month.

* **Member discounts and services are subject to change.**

For more detailed information, visit Members Only Benefits and Services at www.ausa.org
or call Member Support at 855-246-6269 / 703-841-4300

Android smartphones, iPhones and iPads, and the pending release of e-book versions for the Nook, Kindle and other e-book readers should greatly improve *Echoes'* utility and increase electronic subscriptions while reducing publishing costs.

Because current and future retired soldiers remain the Army's most credible ambassadors, providing them up-to-date information about Army programs ensures that the Army story is accurately told across America. In light of this, the Council recommended that the Army:

■ Add the value and significant contributions of retirees to Army-developed senior leader materials and talking points. This will encourage subordinate commanders to engage, support and involve retirees within their communities and educate external audiences that retirees are not a corporate resource but an integral part of the institutional fabric.

■ Increase soldiers' understanding of their entitlements and benefits throughout their careers by incorporating instruction in resident and nonresident courses such as the Garrison Leaders Course, Brigade and Battalion Pre-command/Command Sergeants Major Courses, and the Sergeants Major Course.

■ Recommend spouses receive similar instruction through family readiness groups and Army community services.

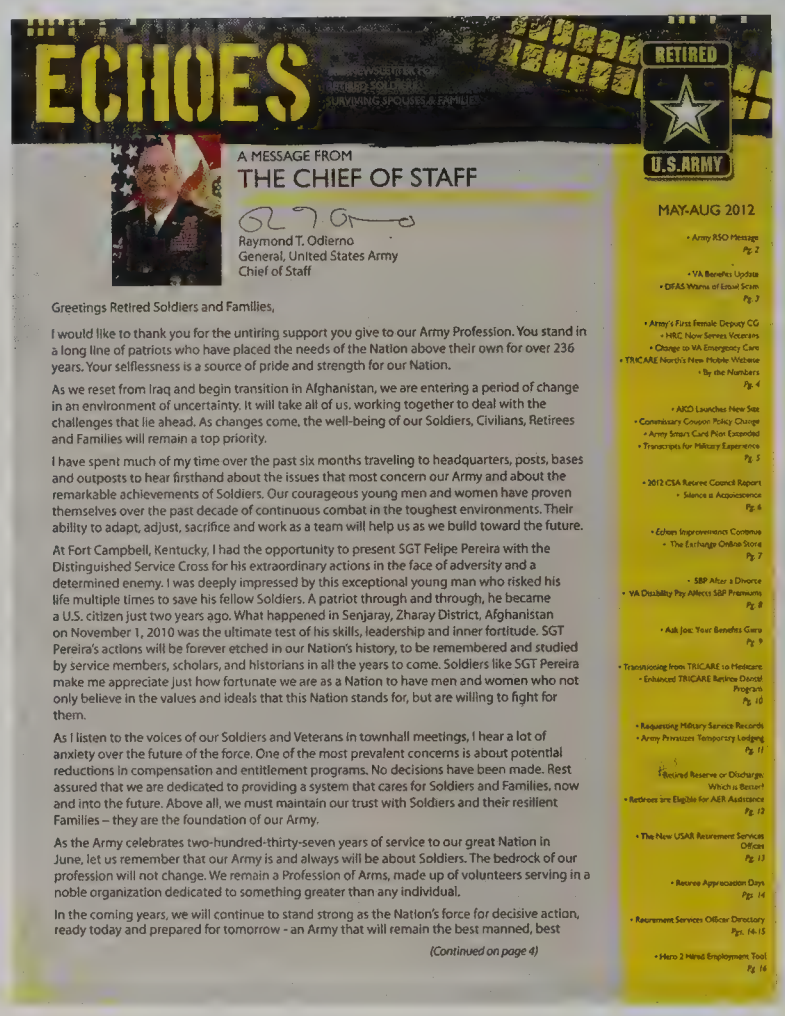
■ Continue funding the publication of *Echoes* three times per year. This is critical for keeping retirees informed of current legal and entitlement issues and Army program and policy changes. A 2010 questionnaire of retired soldiers revealed that 33 percent do not have computer access and must receive *Echoes* by mail. Significant progress was made this year, however, in migrating other retirees to e-*Echoes*. To continue this progress, the Army should devote additional resources to create and maintain *Echoes'* electronic media and minimize publishing costs.

■ Maintain funding for pre- and post-transition services at installations/garrisons worldwide. The Council identified disparate support for retiree services across the Army and suggests that the IMCOM commanding general review retiree services across IMCOM to equalize delivery, the funding of retiree councils and retiree appreciation events, and the engagement of the retired community. Include retirees in senior leader talking points, garrison leader courses, the IMCOM commanding general's top 10 priorities and the Army Family Covenant to help ensure that a culture of retiree support exists at every garrison.

■ Because making the transition to retirement is a significant process for soldiers, provide them a minimum of 12 to 18 months to complete mandatory requirements and avail themselves of transition services. An October 2010 transition experience questionnaire indicated that almost 88 percent of retired soldiers would advise another soldier to attend a pre-retirement briefing; 71 percent of those who attended pre-retirement briefings reported that this experience had a positive impact on their perception of the Army.

■ Complete the establishment of retirement services offices at major Army Reserve and Army National Guard commands to ensure that retiring and retired Reserve and Guard soldiers, their families, and survivors receive the same information as their active component counterparts.

■ Retiring soldiers are authorized the Army Retiring Soldier Commendation Program package, which includes a U.S. Flag, a retired Army pin and other items. Receipt of the flag is required by Title 10 of the U.S. Code, Subsection 12605; the pin by Army Regulation 600-8-7, "Retirement Services Program." Ensure that funding and contracts are sustained so that these items are presented to all soldiers before they retire.


ECHOES

RETIRED

U.S. ARMY

MAY-AUG 2012

A MESSAGE FROM
THE CHIEF OF STAFF

Raymond T. Odierno
General, United States Army
Chief of Staff

Greetings Retired Soldiers and Families,

I would like to thank you for the untiring support you give to our Army Profession. You stand in a long line of patriots who have placed the needs of the Nation above their own for over 236 years. Your selflessness is a source of pride and strength for our Nation.

As we reset from Iraq and begin transition in Afghanistan, we are entering a period of change in an environment of uncertainty. It will take all of us, working together to deal with the challenges that lie ahead. As changes come, the well-being of our Soldiers, Civilians, Retirees and Families will remain a top priority.

I have spent much of my time over the past six months traveling to headquarters, posts, bases and outposts to hear firsthand about the issues that most concern our Army and about the remarkable achievements of Soldiers. Our courageous young men and women have proven themselves over the past decade of continuous combat in the toughest environments. Their ability to adapt, adjust, sacrifice and work as a team will help us as we build toward the future.

At Fort Campbell, Kentucky, I had the opportunity to present SGT Felipe Pereira with the Distinguished Service Cross for his extraordinary actions in the face of adversity and a determined enemy. I was deeply impressed by this exceptional young man who risked his life multiple times to save his fellow Soldiers. A patriot through and through, he became a U.S. citizen just two years ago. What happened in Senjaray, Zharay District, Afghanistan on November 1, 2010 was the ultimate test of his skills, leadership and inner fortitude. SGT Pereira's actions will be forever etched in our Nation's history, to be remembered and studied by service members, scholars, and historians in all the years to come. Soldiers like SGT Pereira make me appreciate just how fortunate we are as a Nation to have men and women who not only believe in the values and ideals that this Nation stands for, but are willing to fight for them.

As I listen to the voices of our Soldiers and Veterans in townhall meetings, I hear a lot of anxiety over the future of the force. One of the most prevalent concerns is about potential reductions in compensation and entitlement programs. No decisions have been made. Rest assured that we are dedicated to providing a system that cares for Soldiers and Families, now and into the future. Above all, we must maintain our trust with Soldiers and their resilient Families – they are the foundation of our Army.

As the Army celebrates two-hundred-thirty-seven years of service to our great Nation in June, let us remember that our Army is and always will be about Soldiers. The bedrock of our profession will not change. We remain a Profession of Arms, made up of volunteers serving in a noble organization dedicated to something greater than any individual.

In the coming years, we will continue to stand strong as the Nation's force for decisive action, ready today and prepared for tomorrow - an Army that will remain the best manned, best

(Continued on page 4)

• Army RSO Message Pg. 2
• VA Benefits Update
• DFAS Warns of Email Scam Pg. 3
• Army's First Female Deputy CG
• HRC Now Serves Veterans
• Change to VA Emergency Care
• TRICARE North's New Mobile Website
• By the Numbers Pg. 4
• AER Launches New Site
• Commissary Coupon Policy Change
• Army Smart Card Pilot Extended
• Transcripts for Military Experience Pg. 5
• 2012 CSA Retiree Council Report
• Silence = Acquiescence Pg. 6
• Echoes Improvements Continue
• The Exchange Online Store Pg. 7
• SBP After a Divorce
• VA Disability Pay Affects SBP Premiums Pg. 8
• Ask Joe: Your Benefits Guru Pg. 9
• Transitioning from TRICARE to Medicare
• Enhanced TRICARE Retiree Dental Program Pg. 10
• Requesting Military Service Records
• Army Privatizes Temporary Lodging Pg. 11
• Retired Reserve or Discharge: Which is Better?
• Retirees are Eligible for AER Assistance Pg. 12
• The New USAR Retirement Services Offices Pg. 13
• Retiree Appreciation Days Pgs. 14
• Retirement Services Officer Directory Pgs. 14-15
• Hero 2 Hired Employment Tool Pg. 16

Echoes, *the Army's official newsletter for retirees and surviving spouses, is estimated to have more than two million readers. Recently, the Army published apps that download* Echoes *to electronic devices.*

Benefits

The Council members appreciated the Defense Finance and Accounting Service's continued process improvements, which clearly focus on best practices and efficient customer service.

In the area of benefits, the Council recommended that the Army:

■ Strongly oppose any initiative that adversely affects recruiting and retaining soldiers. The REDUX retirement plan of 1986 is sufficient evidence of the harm a change to retiree pay plans can have on the readiness of the force. Initiatives that cause Army retired pay and benefits to mirror that of corporate professionals should also be strongly opposed.

■ Acknowledge spouses' long-term commitment to the Army by issuing them indefinite ID cards at age 65 instead of 75. Eliminating the requirement to renew spouses' ID cards every four years between ages 65 and 75 would result in savings of approximately $10 million.

■ Permit the children of soldiers being medically retired to use on-post child-care services for up to six months after the soldiers' retirements. Most of the Army's privatized property management partners already allow military

families to reside on installations for six months after the soldiers' medical retirements. Extending child-care privileges would help these soldiers and their families in this transition.

■ Recognize the contributions of surviving spouses by allowing them to use space-available air travel. Send a strong message that their support of the Army will not be forgotten after the deaths of their soldiers. As the lowest priority category, surviving spouses would not burden the standby system.

Other Initiatives

The CSA Retiree Council and installation retiree councils advise commanders on retiree issues and deliver the Army's message to retirees and the local civilian population, a vital part of America's support for its Army. The work of these councils is coordinated through the Army Retirement Services Office (RSO), part of the Office of the Deputy Chief of Staff, G-1. The Army Retirement Services mission is threefold: preparing soldiers and families for retirement; aiding the spouses of soldiers who die on active duty in making survivor benefit elections for their families; and continuing to support soldiers and families after retirement. This mission is accomplished through policy and program management at the Army level and through the personal guidance of RSOs at installation level.

Together, the Army Retirement Services Office, the Army Reserve and the Army National Guard recorded new milestones in ensuring that Reserve and Guard soldiers and their families receive the same retirement support as retiring active component soldiers and families.

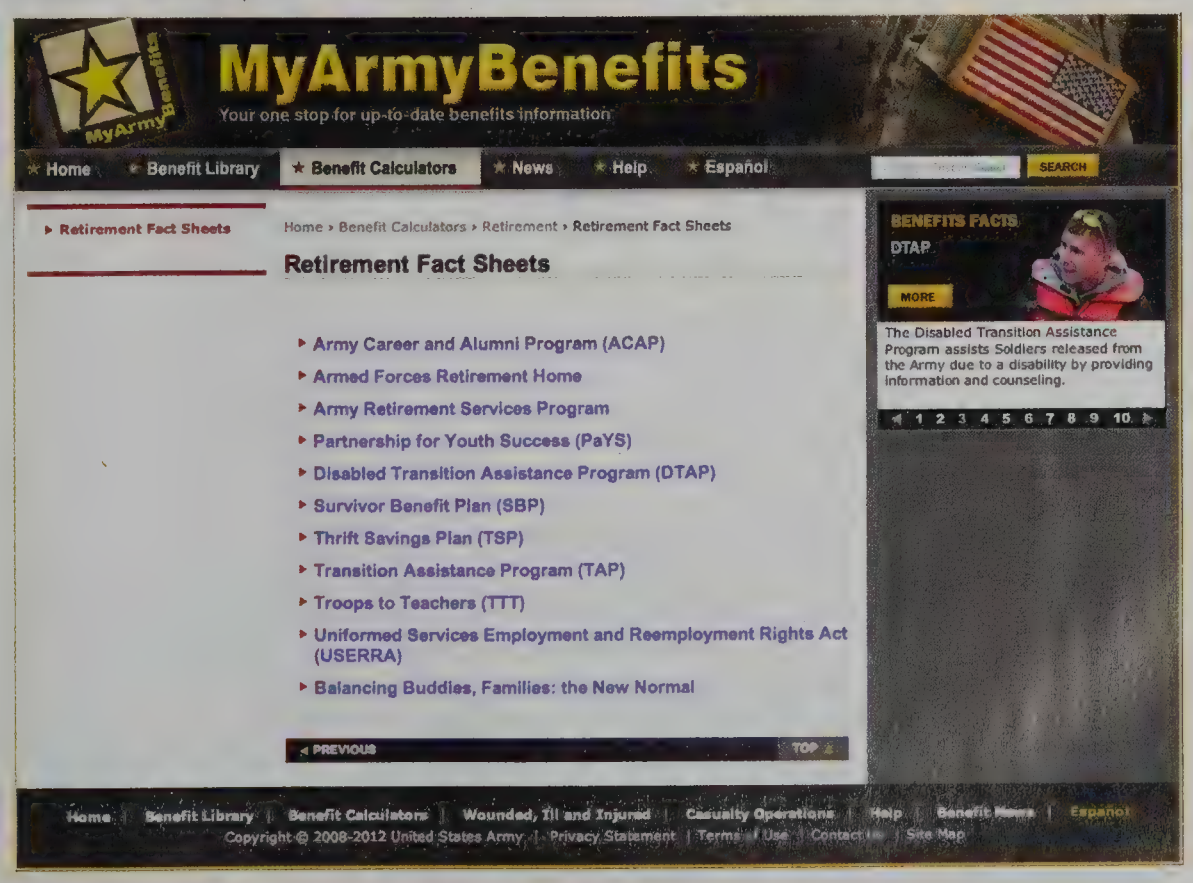
The Army Reserve began training and assigning two RSOs to each regional support command to care specifically for Reserve soldiers and their families as they approach retirement. Reserve soldiers from across the United States gathered at pre-retirement seminars at Fort Snelling, Minn., Fort Dix, N.J., Fort Jackson, S.C., and Orlando, Fla., to hear these new RSOs and other agencies' representatives explain Reserve retired pay and benefits, the Reserve Component Survivor Benefit Plan (RCSBP), TRICARE Retired Reserve and other TRICARE programs, and veterans' education and employment benefits.

The National Guard hosted its third annual retirement services training seminar, focusing on training Guardsmen to accurately advise retiring National Guard soldiers and administering the RCSBP.

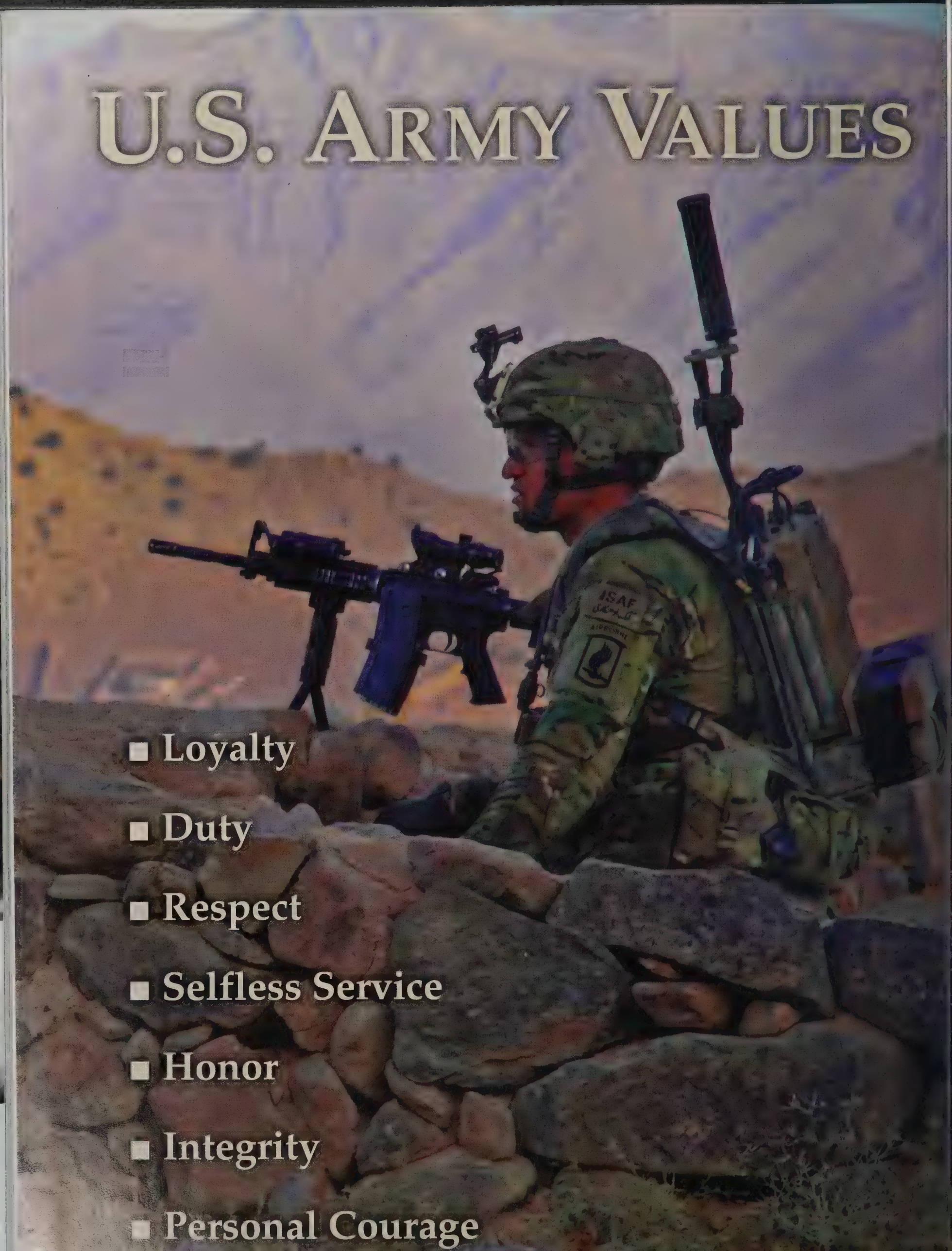
The Council recognized the significant resource challenges facing the Army and the resulting impact on personnel and programs. In this environment, retiree volunteer service will be needed more than ever. As part of the Army team, retirees will continue to do their part in telling the Army story and in providing support wherever and whenever needed. The ongoing volunteer service of so many of the more than one million retirees and surviving spouses is an enduring commitment to the Army, to active duty and retired soldiers, and to their family members.

Retired soldiers are still proud, still serving, still saluting! ★

Left, soldiers and family members from the Army National Guard and the Army Reserve attend a pre-retirement seminar at Fort Snelling, Minn., held in April. Below, the official Army benefits website offers up-to-date information at http://myarmybenefits.us.army.mil/Home.html.



U.S. Army Values



- Loyalty
- Duty
- Respect
- Selfless Service
- Honor
- Integrity
- Personal Courage

ARMY WINNERS

Runners start the 27th Army Ten-Miler near the Pentagon in October 2011. More than 30,000 competitors and 540 teams competed in one of the largest 10-mile races in the world. Runners from the U.S. Army World Class Athlete Program and All-Army Sports successfully defended the International Cup.

All-Army Team—The 2011 All-Army Overall Team and International Army Ten-Miler winner.

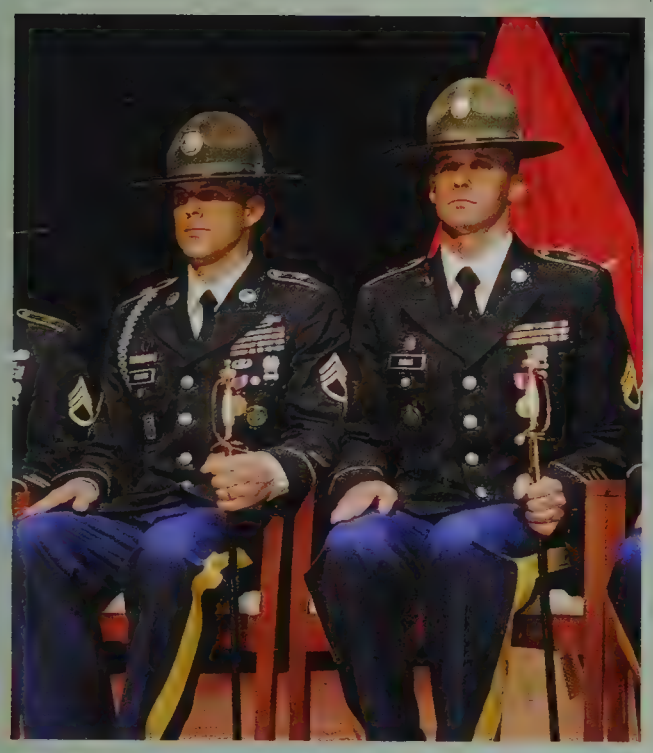
Masters' Winners—The Fort Bragg master team, winner of The Commander's Cup in the 2011 Army Ten-Miler age-40-and-above division.

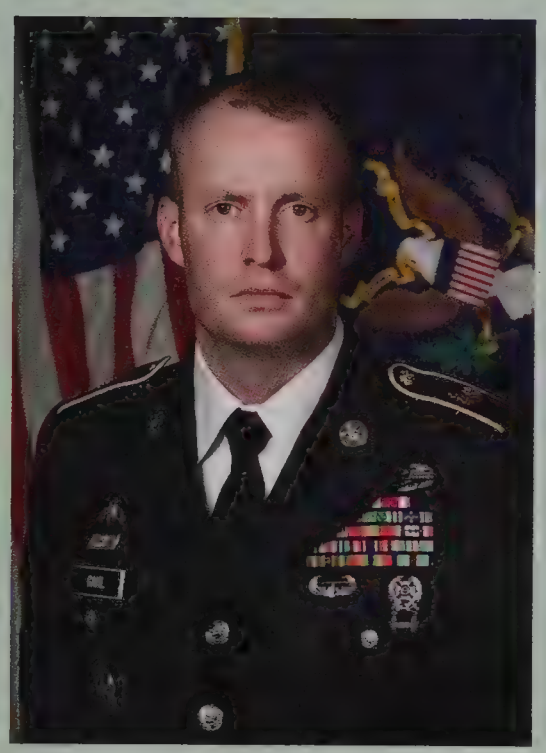
Women's Winners—The Fort Bragg women's team, winner of The Commander's Cup in the 2011 Army Ten-Miler.

Men's Winners—The Fort Bragg, N.C., men's team, winner of The Commander's Cup in the 2011 Army Ten-Miler men's division.

NCO/Soldier of the Year—2011 NCO of the Year SGT Guy M. Mellor, left, Utah National Guard; and 2011 Soldier of the Year PFC Thomas M. Hauser, Fort Drum, N.Y.

Drill Sergeants of the Year—2012 active duty Drill Sergeant of the Year SSG Jeffrey Heilman, left, Fort Jackson, S.C.; and 2012 Army Reserve Drill Sergeant of the Year SSG Jarod Moss, Fort Sill, Okla.





AIT Platoon Sergeant of the Year—SFC Paul Gahl, Fort Sill, Okla.

ecretary of the Army Career Counselor of the Year—SFC William Bastian (center), 3rd U.S. Infantry Regiment (The Old Guard), accepts the award from SGM Merle Henry, USA Ret. (right), and SGM Dean Drummond.

USO Soldier of the Year—CPL David J. Bixler accepts the award from CSA GEN Raymond T. Odierno. USO President Sloan Gibson (left); USO Board of Governors chair GEN Richard Myers, USAF Ret. (center); and Chairman of the Joint Chiefs GEN Martin Dempsey look on.

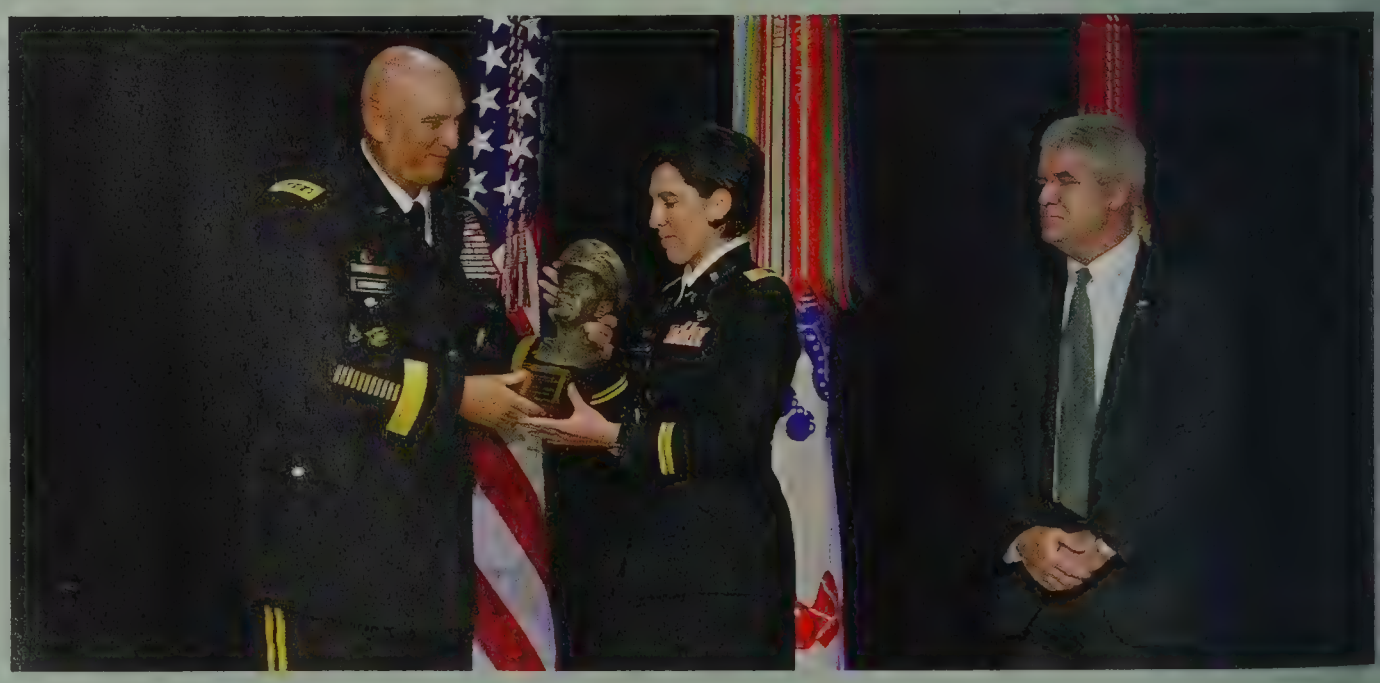
2012 Best Rangers— SFC Thomas Payne (left) and MSG Kevin Foutz (center), U.S. Army Special Operations Command.

2012 Best Sappers—The 82nd Airborne's SSG Frank Batts (left) and CPT Mike Kendall.

CSM Jack L. Clark Jr. Best Medic Team—75th Ranger Regiment's SSG Christopher Whitaker (left) and SFC John Maitha.

2012 Best Tankers—From left, SFC Ryan Dilling, SGT Zachary Shaffer, PFC Kyle Braun and PFC Mark Backer flank AUSA President GEN Gordon R. Sullivan, USA Ret., and AUSA Director of NCO and Soldier Programs CSM Jimmie W. Spencer, USA Ret.

2011 General Douglas MacArthur Leadership Award—CPT Audrey L. Fielding, Ohio Army National Guard, accepts her award from Army Chief of Staff GEN Raymond T. Odierno. Twenty-two other officers from all three Army components received the award.



Walter T. Kerwin Jr. Award Winners—CSA GEN Raymond T. Odierno and SMA Raymond F. Chandler III flank (left) LTC Brian Pierce and CSM Gary Hamm (representing 1st Attack Reconnaissance Battalion, North Carolina National Guard) and (right) LTC Edward L. Keen and CSM Edward Simpson (representing 384th Military Police Battalion, U.S. Army Reserve, Fort Wayne, Ind.).

2011 Women in Aerospace Leadership Award—then-COL Laura J. Richardson, a Black Hawk pilot and now deputy commander (support) of 1st Cavalry Division, accepts the award from Katherine Sullivan, the first American woman to have walked in space.

2011 AUSA/ARCIC Writing Contest—COL Kevin M. Felix (center) is honored by AUSA President GEN Gordon R. Sullivan, USA Ret. (left), and LTG Keith Walker, Director of the Army Capabilities Integration Center.

2011 Army Coach and Athletes of the Year—Army Chief of Staff GEN Raymond T. Odierno presents awards to, left to right, Coach of the Year LTC Liam Collins, Female Athlete of the Year CPT Danielle Cook and Male Athlete of the Year 1LT Charles Ware III.

1LT Derek Taylor, Headquarters and Headquarters Company, 2-87 Infantry, 3rd Brigade Combat Team, is well on his way to victory in the Army Ten-Miler Shadow Run on Forward Operating Base Pasab, Zharay district, Kandahar Province, Afghanistan, last October.

★★★ ARMY WINNERS ★ ARMY WINNERS ★ ARMY WINNERS ★★★

Interservice Rifle Champions—Soldiers from the U.S. Army Marksmanship Unit, winners of the 10-man Interservice Team Rifle Championship.

Record Breaker—SSG Joel Micholick set a new match record in the 1,000-yard aggregate with the service rifle during the 50th Interservice Rifle Championship.

2012 Skeleton Champion—SPC Megan Henry won the women's U.S. National Skeleton Championship with the fastest start and finish times in all four heats.

2011 Sullivan and Campbell Awards Winner—Then-cadet Andrew Rodriguez, linebacker at the U.S. Military Academy, won the 2011 James E. Sullivan Award, as top U.S. amateur athlete, and the National Football Foundation's William V. Campbell Trophy as the nation's top scholar-athlete in college football.

2012 Warrior Games Winners—The Army topped the Marines to win the sitting volleyball gold medal.

Warrior Games Sweep—The Army team swept the women's cycling 10K event: Tanya Anderson (center) won gold, Margaux Vair was second, and 1LT Lacey Hamilton took third.

Shot Put—Army veteran Chanda Gaeth took bronze with a 5.22-meter throw in the women's shot put wheelchair-field competition during the track and field portion of the 2012 Warrior Games.

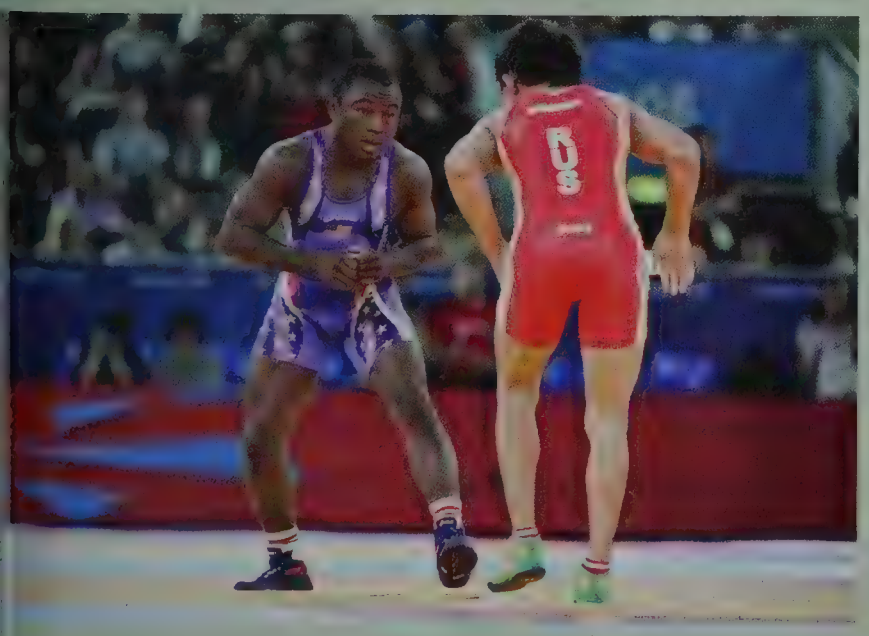
Hand Cycling—CPT William Longwell crosses the finish line and takes the gold medal in the 2012 Warrior Games Men's 10K hand cycle event.

SGT Vincent C. Hancock took gold in men's skeet at the Olympics, scoring 148 out of 150 shots and beating his own world record set in the 2008 Olympics in Beijing, China.

SFC Josh Olson, who lost a leg when struck by a rocket-propelled grenade in Iraq, is the first active duty soldier to be nominated for the Paralympic Games.

SPC Dennis Bowsher, who also competed in the 2012 Olympics, finished fourth in the men's modern pentathlon at the 5th CISM Military World Games in Rio de Janeiro, Brazil.

SSG John Nunn finished 43rd in the 2012 Olympics 50-km race walk in London, England, with a personal best time of 4:03:28.



Army World Class Athlete Program (WCAP) SGT Spenser Mango finished ninth in the 55-kilogram/121-pound Greco-Roman division of the Olympic wrestling tournament.

WCAP Greco-Roman wrestlers (from left) SPC Justin Lester, SFC Dremiel Byers and SGT Mango earned berths on Team USA at the 2012 U.S. Olympic Trials.

THE FUTURE STRENGTH IS HERCULEAN.

Hercules held the weight of the world on his shoulders; BAE Systems' M88A2 HERCULES holds the weight of the Army. Designed and integrated as the service's all-purpose maintenance vehicle, the M88A2 has the versatility and strength to aid in any mission. With the ability to single-handedly recover, lift, and sustain any other vehicle in the fleet, HERCULES' cost-effective, combat-proven platform is the Army's heavyweight.

baesystems.com

BAE SYSTEMS

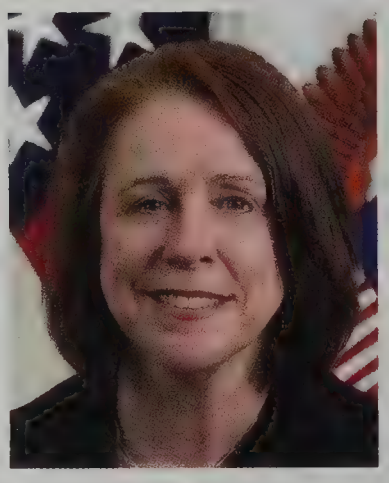
COMMAND & STAFF

ARMY SECRETARIAT

Hon. John McHugh
Secretary of the Army

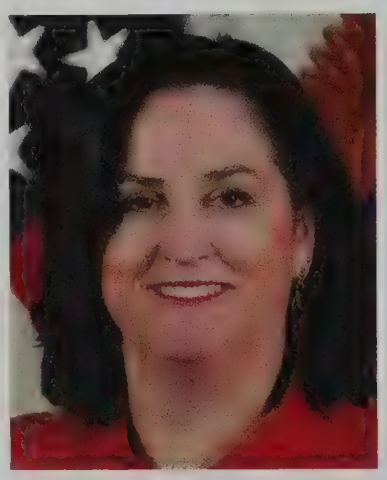
Hon. Joseph Westphal
Under Secretary of the Army

Hon. Thomas R. Lamont
Asst. Secretary
(Manpower and Reserve Affairs)



Hon. Jo-Ellen Darcy
Asst. Secretary
(Civil Works)

Hon. Mary Sally Matiella
Asst. Secretary (Financial
Management and Comptroller)



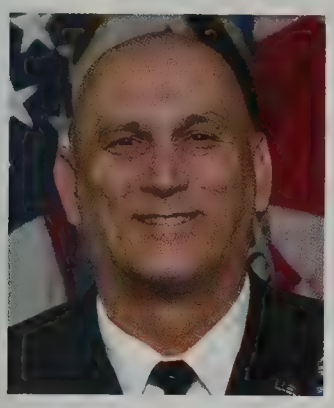
Hon. Katherine G. Hammack
Asst. Secretary
(Installations, Energy and
Environment)

Hon. Brad R. Carson
General Counsel

Ms. Heidi Shyu
Acting Asst. Secretary (Acquisition,
Logistics and Technology)

The information in this directory is based on data supplied by the Department of the Army.

OFFICE OF THE CHIEF OF STAFF



GEN Raymond T. Odierno
Chief of Staff

GEN Lloyd J. Austin III
Vice Chief of Staff

SMA Raymond F. Chandler III
Sergeant Major of the Army

LTG Dana K. Chipman
The Judge Advocate General

LTG Patricia D. Horoho
The Surgeon General

MG David E. Quantock
Provost Marshal General

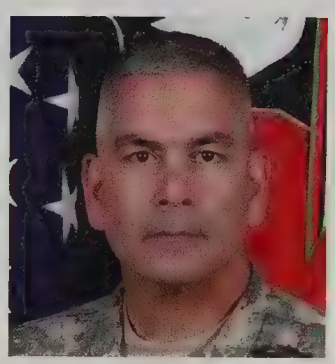
Ch. (MG) Donald L. Rutherford
Chief of Chaplains

THE ARMY STAFF

LTG William J. Troy
Director, Army Staff

LTG Howard B. Bromberg
DCS, G-1

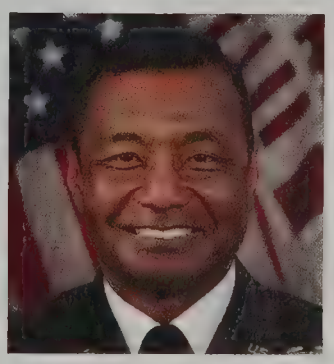
LTG Mary A. Legere
DCS, G-2



LTG John F. Campbell
DCS, G-3/5/7

LTG Raymond V. Mason
DCS, G-4

LTG James O. Barclay
DCS, G-8



LTG Thomas P. Bostick
Chief of Engineers

LTG Michael Ferriter
ACS, Installation Management

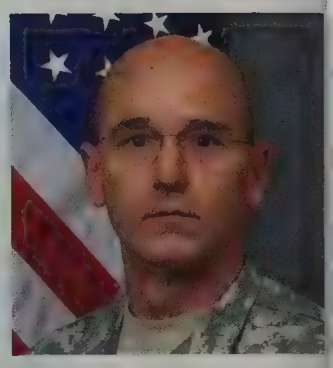
NATIONAL GUARD AND ARMY RESERVE

GEN Frank J. Grass
Chief, National Guard Bureau

LTG Jeffrey W. Talley
Chief, Army Reserve

LTG William E. Ingram Jr.
Director, Army National Guard

CSM Michael D. Schultz
Command Sergeant Major,
Army Reserve



CSM Richard J. Burch
Command Sergeant Major,
Army National Guard

ARMY SECRETARIAT PRINCIPAL AND SPECIAL STAFF

Mr. Thomas E. Hawley
Deputy Under Secretary
of the Army

Ms. Joyce Morrow
Administrative Assistant
to the Secretary of the Army

LTG William N. Phillips
Mil. Dep./Dir. Army Acquisition
Corps, OASA (ALT)

LTG Susan S. Lawrence
Chief Information Officer/G-6

LTG William T. Grisoli
Director, Office of Business
Transformation, OUSA

LTG Peter M. Vangjel
The Inspector General

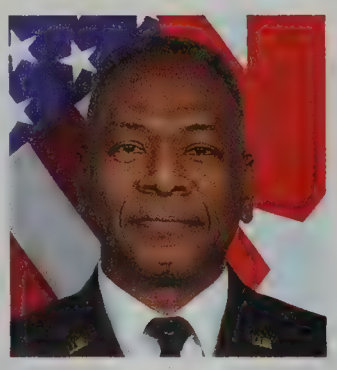
LTG Joseph E. Martz
Mil. Dep. Budget, OASA
(Financial Management
and Comptroller)

Mr. Randall Exley
Auditor General

Ms. Kathryn Condon
Executive Director, Army
National Military Cemeteries

MG William E. Rapp
Chief, Legislative Liaison

Ms. Tracey L. Pinson
Director, Small Business
Programs



MG Errol R. Schwartz
Chairman, Army Reserve Forces
Policy Committee

BG Gary J. Volesky
Chief, Public Affairs

SENIOR ARMY OFFICERS IN SPECIAL/JOINT ASSIGNMENTS

(Officers are listed here according to their combined, joint or other special assignment title. If an officer also holds an Army-specific command position—a "dual-hat" assignment—he or she is listed by that title in the respective Command and Staff section.)

Commander, U.S. Africa Command
GEN Carter F. Ham

Director, National Security Agency/ Chief, Central Security Service/Commander, U.S. Cyber Command
GEN Keith B. Alexander

Commander, United Nations Command/Combined Forces Command/ U.S. Forces Korea
GEN James D. Thurman

Commander, U.S. Northern Command/ Commander, North American Aerospace Defense Command
GEN Charles H. Jacoby Jr.

Deputy Commander, U.S. Transportation Command
LTG Kathleen M. Gainey

Deputy Commander, U.S. Special Operations Command
LTG John F. Mulholland Jr.

Director, Missile Defense Agency
LTG Patrick J. O'Reilly

Chief, Office of the Defense Representative–Pakistan U.S. Central Command
LTG Purl K. Keen

Director, Joint Improvised Explosive Device Defeat Organization
LTG Michael D. Barbero

Principal Deputy Director of Cost Assessment and Program Evaluation Office of the Secretary of Defense
LTG Robert P. Lennox

Commander, Combined Joint Interagency Task Force 435 U.S. Central Command
LTG Keith M. Huber

Chief, Office of Security Cooperation-Iraq U.S. Central Command
LTG Robert L. Caslen Jr.

Commander, Force Command, Heidelberg, North Atlantic Treaty Organization
LTG John W. Morgan III

Commander, Combined Security Transition Command-Afghanistan/ Commander, NATO Training Mission-Afghanistan
LTG Daniel P. Bolger

Director, The Joint Staff
LTG Curtis M. Scaparrotti

Commanding General, Eighth U.S. Army/ Chief of Staff, Combined Forces Command
LTG John D. Johnson

Commander, Joint Special Operations Command/ Commander, Joint Special Operations Command Forward U.S. Special Operations Command
LTG Joseph L. Votel

Director, Defense Intelligence Agency
LTG Michael T. Flynn

Director, Strategic Plans and Policy, J-5, Joint Staff and Senior Member, U.S. Delegation to the U.N. Military Staff Committee
LTG Terry A. Wolff

Commander, International Security Assistance Force Joint Command/ Deputy Commander, U.S. Forces-Afghanistan
LTG James L. Terry

Deputy Under Secretary of Defense (Intelligence) for Joint Coalition and Warfighter Support, Office of the Under Secretary of Defense for Intelligence
LTG Raymond P. Palumbo

Assistant Director of National Intelligence for Partner Engagement Office of the Director of National Intelligence
LTG Theodore C. Nicholas

SENIOR WARRANT OFFICERS IN SPECIAL/JOINT ASSIGNMENTS

Office of the Secretary of the Army
CW5 Charles E. Clayton

Office of the Chief of Staff, Army
CW5 Ronald G. Galloway

Office of the Vice Chief of Staff, Army
CW5 Landy D. Flowers

Headquarters, Department of the Army/G-3/5/7
CW5 David Williams

Headquarters, Department of the Army/G-1
CW5 Arland W. Jackson

SENIOR COMMAND SERGEANTS MAJOR IN SPECIAL/JOINT ASSIGNMENTS

(Command sergeants major are listed here according to their combined, joint or other special assignment title. If a command sergeant major holds an Army-specific command position—a "dual-hat" assignment—he or she is listed by that title in the respective Command and Staff section.)

U.S. Central Command
CSM Frank Grippe

International Security Assistance Force-NATO, Afghanistan
CSM Thomas R. Capel

U.S. Special Operations Command
CSM Chris C. Faris

U.S. Northern Command/North American Aerospace Defense Command
CSM Robert A. Winzenried

U.S. Strategic Command
CSM Patrick Z. Alston

United Nations Command/Combined Forces Command/U.S. Forces Korea
CSM Anthony Mahoney

U.S. Pacific Command
CSM Frank M. Leota

Space and Missile Defense Command & Army Forces Strategic Command
CSM Larry S. Turner

Defense Information Systems Agency/Joint Task Force Global Network Operations
CSM Donald G. Manley

Defense Logistics Agency
CSM Sultan A. Muhammad

NATO Training Mission-Afghanistan/Combined Security Transition Command-Afghanistan
CSM Jeffery Hof

U.S. Joint Force Headquarters-National Capital Region
CSM David Turnbull

U.S. Training Mission to Saudi Arabia
CSM Matthew D. Barnes

Special Operations Command Central
CSM Jeffrey Stigall

Joint Improvised Explosive Device Defeat Organization
CSM William E. High

Special Operations Command-Pacific
CSM Anthony Pettengill

ARMY STAFF FIELD OPERATING AGENCIES/SUPPORT AGENCIES

Army Audit Agency
Alexandria, Va.
Randall Exley

Army Corrections Command
Arlington, Va.
MG David E. Quantock

Army Environmental Policy Institute
Arlington, Va.
Joseph S. Vallone (Acting)

Army Public Affairs Center
Fort Meade, Md.
COL Christopher Garver

Army Review Boards Agency
Arlington, Va.
Catherine Mitrano

Asymmetric Warfare Group
Fort Meade, Md.
COL James Mis

Center for Army Analysis
Fort Belvoir, Va.
E.B. Vandiver III

Center of Military History
Washington, D.C.
Robert J. Dalessandro

Civilian Human Resources Agency
Aberdeen Proving Ground, Md.
Barbara Panther

Command and Control Support Agency
Washington, D.C.
COL Kenneth C. Blakely

Diversity and Civil Rights
Arlington, Va.
Larry Stubblefield

Finance Management Command
Indianapolis, Ind.
COL Stanley Brown

Force Management Support Agency
Fort Belvoir, Va.
MG John (Mike) Murray
SGM Ricardo Morales

Inspector General Agency
Arlington, Va.
LTG Peter M. Vangjel

Installation Support Management Activity
Arlington, Va.
Craig College

Judge Advocate General's Legal Center and School
Charlottesville, Va.
BG Thomas E. Ayres
CW4 Jennifer Young
SGM Joseph Lister

Legal Services Agency
Arlington, Va.
BG Flora D. Darpino
CW4 Elias Lykes

Logistics Innovation Agency
Fort Belvoir, Va.
Vic Ramdass

Human Resources Command
Fort Knox, Ky.
MG Richard P. Mustion
CSM Bruce A. Lee

U.S. Army Combat Readiness/Safety Center
Fort Rucker, Ala.
BG Timothy J. Edens
CSM Richard Stidley

U.S. Army Field Band
Fort Meade, Md.
COL Tim Holton

U.S. Army Headquarters Services
Arlington, Va.
Steve Redmann

U.S. Army Information Technology Agency
Arlington, Va.
Gregory Garcia

U.S. Army Manpower Analysis Agency
Fort Belvoir, Va.
Gwendolyn R. DeFillipi

U.S. Army Resources and Programs Agency
Arlington, Va.
Gerald O'Keefe

FORCES COMMAND

Headquarters
Fort Bragg, N.C.
GEN David M. Rodriguez
CSM Darrin J. Bohn

First U.S. Army
Rock Island, Ill.
LTG J. Michael Bednarek
CSM Jesse L. Andrews Jr.

First Army Division-East
Fort Meade, Md.
MG Kevin R. Wendel
CSM Edwin Rodriguez

First Army Division-West
Fort Hood, Texas
MG Perry L. Wiggins
CSM Ronald E. Orosz

I Corps
Joint Base (JB) Lewis-McChord, Wash.
LTG Robert B. Brown
CSM John W. Troxell

2nd Stryker Combat Brigade Team (SBCT), 2nd Infantry Division
JB Lewis-McChord, Wash.
COL Barry F. Huggins
CSM Andrew B. Connette

3rd SBCT, 2nd Infantry Division
JB Lewis-McChord, Wash.
COL Charles Webster
CSM Samuel Murphy

4th SBCT, 2nd Infantry Division
JB Lewis-McChord, Wash.
COL Michael Getchell
CSM Paul D. Balmforth

16th Combat Aviation Brigade
JB Lewis-McChord, Wash.
COL Robert Dickerson
CW5 Allen J. Gollmyer
CSM Lucio (Niko) Vandevoorde

17th Fires Brigade
JB Lewis-McChord, Wash.
COL Kenneth L. Kamper
CSM Daniel S. Moriarty

42nd Military Police Brigade
JB Lewis-McChord, Wash.
COL Robert M. Taradash
CSM Dawn J. Rippelmeyer

62nd Medical Brigade
JB Lewis-McChord, Wash.
COL John P. Collins
CSM Eugene Jeffers

201st Battlefield Surveillance Brigade
JB Lewis-McChord, Wash.
COL Paul Norwood
CSM Dayron Vargas

555th Engineer Brigade
JB Lewis-McChord, Wash.
COL Nicholas Katers
CSM Kevin Bryan

593rd Sustainment Brigade
JB Lewis-McChord, Wash.
COL Douglas Arthur McBride Jr.
CSM Eric L. Taylor

Joint Base Garrison
JB Lewis-McChord, Wash.
COL Chuck Hodges
CMSgt. Dedra Lewis

III Corps
Fort Hood, Texas
LTG Donald M. Campbell Jr.
CSM Scott C. Shroeder

1st Cavalry Division
Fort Hood, Texas
MG Anthony R. Ierardi
CSM James P. Norman III

1st Brigade Combat Team (BCT) 1st Cavalry Division
Fort Hood, Texas
COL Steven W. Gilland
CSM Mervyn M. Ripley Jr.

2nd BCT, 1st Cavalry Division
Fort Hood, Texas
COL Robert F. Whittle
CSM Emmett Maunakea

3rd BCT, 1st Cavalry Division
Fort Hood, Texas
COL David Lesperance
CSM Benjamin Jones

4th BCT, 1st Cavalry Division
Fort Hood, Texas
COL William Benson
CSM Christopher Menton

1st Air Cavalry Brigade, 1st Cavalry Division
Fort Hood, Texas
COL Corey A. Mendenhall
CW5 Troy A. Degolyer
CSM Chris Amagliani

41st Fires Brigade
Fort Hood, Texas
COL William E. McRae
CSM Antonio Dunston

4th Infantry Division (Mechanized)
Fort Carson, Colo.
MG Joseph Anderson
CSM Brian Stall

1st Heavy Brigade Combat Team (HBCT), 4th Infantry Division
Fort Carson, Colo.
COL Joel K. Tyler
CSM Daniel Defreese

2nd HBCT, 4th Infantry Division
Fort Carson, Colo.
COL Omar Jones
CSM Robert Lehtonen

3rd HBCT, 4th Infantry Division
Fort Carson, Colo.
COL Michael C. Kasales
CSM Douglas R. Maddi

4th Infantry Brigade Combat Team (IBCT), 4th Infantry Division
Fort Carson, Colo.
COL James J. Mingus
CSM Danny Day

43rd Sustainment Brigade
Fort Carson, Colo.
COL Todd A. Heussner
CSM Randy S. Varner

214th Fires Brigade, 4th Infantry Division
Fort Sill, Okla.
COL Timothy J. Daugherty
CSM Michael E. Giles

3rd Armored Cavalry Regiment
Fort Hood, Texas
COL John Richardson
CSM Patrick Akuna

13th Sustainment Command (Expeditionary)
Fort Hood, Texas
BG Clark W. LeMasters Jr.
CSM Terry E. Parham Sr.

1st Medical Brigade, 13th Sustainment Command
Fort Hood, Texas
COL Bruce McVeigh
CSM Michael J. Mullaney

4th Sustainment Brigade, 13th Sustainment Command
Fort Hood, Texas
COL Ronald Kirklin
CSM Erik R. Frey

21st Cavalry Brigade
Fort Hood, Texas
COL Neil Hersey
CW5 Kevin M. Detlefsen
CSM Todd W. Vance

31st Air Defense Artillery Brigade (32nd AAMDC)
Fort Sill, Okla.
COL Michael T. Morrissey
CSM Gerardo Dominguez

36th Engineer Brigade
Fort Hood, Texas
COL David Hill
CSM Geoffrey Harris

89th Military Police Brigade
Fort Hood, Texas
COL Robert N. Dillon
CSM Peter J. Ladd

504th Battlefield Surveillance Brigade
Fort Hood, Texas
COL Charles Hensley
CSM Anthony Whitney

13th Financial Management Center
Fort Hood, Texas
COL Archie Davis
SGM Deborah Gibson

69th Air Defense Artillery Brigade (32nd AAMDC)
Fort Hood, Texas
COL Randall McIntire
CSM Finis Dodson

85th Civil Affairs Brigade
Fort Hood, Texas
COL Leo Ruth II
CSM Mark Berry

1st Infantry Division
Fort Riley, Kan.
MG William C. Mayville
CSM James B. Champagne

1st HBCT, 1st Infantry Division
Fort Riley, Kan.
COL Michael Pappal
CSM John Jones

2nd HBCT, 1st Infantry Division
Fort Riley, Kan.
COL Jeffery Broadwater
CSM Christopher Gilpin

3rd IBCT, 1st Infantry Division
Fort Knox, Ky.
COL William Ostlund
CSM Bradley Meyers

4th IBCT, 1st Infantry Division
Fort Riley, Kan.
COL Joseph D. Wawro
CSM Wylie G. Hutchison

Combat Aviation Brigade, 1st Infantry Division
Fort Riley, Kan.
COL John Morgan
CW5 Arthur M. Blakemore
CSM James Thomson

Sustainment Brigade, 1st Infantry Division
Fort Riley, Kan.
COL Brian Tempest
CSM Miguel Rivera

75th Fires Brigade
Fort Sill, Okla.
COL Alfredo Najera
CSM Carlos R. Soto

4th Maneuver Enhancement Brigade
Fort Leonard Wood, Mo.
COL Frank Y. Rangel
CSM William Allen

1st Armored Division,
Fort Bliss, Texas
MG Dana Pittard
CSM Ronnie R. Kelley

1st BCT, 1st Armored Division
Fort Bliss, Texas
COL Kenneth Adgie
CSM Russell Reimers

2nd BCT, 1st Armored Division
Fort Bliss, Texas
COL Thomas Dorame
CSM Arthur Conners III

3rd BCT, 1st Armored Division
Fort Bliss, Texas
COL Mark H. Landes
CSM Corbett L. Whitmore

4th BCT, 1st Armored Division
Fort Bliss, Texas
COL Terry Cook
CSM Richard R. Clark

Combat Aviation Brigade, 1st Armored Division
Fort Bliss, Texas
COL Lonnie G. Hibbard
CW5 Kevin Smith
CSM Michael P. O'Donnell

212th Fires Brigade
Fort Bliss, Texas
COL David Hamilton
CSM Jesus DeGracia

15th Sustainment Brigade
Fort Bliss, Texas
COL Curtis A. Johnson
CSM Larry Parks

32nd Army Air Missile Defense Command
Fort Bliss, Texas
BG James H. Dickinson
CSM James N. Ross

11th Air Defense Artillery Brigade
Fort Bliss, Texas
COL Reginald Davis
CSM Byron E. Ferguson

XVIII Airborne Corps
Fort Bragg, N.C.
LTG Daniel B. Allyn
CSM Isaia Vimoto

3rd Infantry Division
Fort Stewart, Ga.
MG Robert B. (Abe) Abrams
CSM Edd Watson

1st HBCT, 3rd Infantry Division
Fort Stewart, Ga.
COL James R. Crider
CSM Herbert O. Kirkover

2nd HBCT, 3rd Infantry Division
Fort Stewart, Ga.
COL Douglas C. Cardinale
CSM Jefferson D. Moser

3rd HBCT, 3rd Infantry Division
Fort Benning, Ga.
COL Johnnie L. Johnson Jr.
CSM Brian D. Harrison

4th IBCT, 3rd Infantry Division
Fort Stewart, Ga.
COL Kimo C. Gallahue
CSM Brendan P. McIntyre

Combat Aviation Brigade, 3rd Infantry Division
Hunter Army Airfield, Ga.
COL Allan M. Pepin
CW5 Allen R. Godfrey
CSM James Snyder

3rd Sustainment Brigade
Fort Stewart, Ga.
COL Joseph R. Novack Jr.
CSM Forbes Daniels

10th Mountain Division (Light Infantry)
Fort Drum, N.Y.
MG Mark A. Milley
CSM Rick Merritt

1st IBCT, 10th Mountain Division
Fort Drum, N.Y.
COL Stephen L. Michael
CSM David Martel

2nd IBCT, 10th Mountain Division
Fort Drum, N.Y.
COL Dennis S. Sullivan
CSM Benjamin Jones

3rd IBCT, 10th Mountain Division
Fort Drum, N.Y.
COL Samuel E. Whitehurst
CSM Sean T. Watson

4th IBCT, 10th Mountain Division
Fort Polk, La.
COL Mario Diaz
CSM Noe Salinas

Combat Aviation Brigade, 10th Mountain Division
Fort Drum, N.Y.
COL David Francis
CW5 Jeffrey J. Fitzgerald
CSM Kenneth E. Patton

10th Sustainment Brigade
Fort Drum, N.Y.
COL Kurt J. Ryan
CSM Jose A. Castillo

82nd Airborne Division
Fort Bragg, N.C.
MG James L. Huggins
CSM Bryant C. Lambert

1st IBCT (Airborne), 82nd Airborne Division
Fort Bragg, N.C.
COL Mark L. Stock
CSM Joey Love

2nd IBCT (Airborne), 82nd Airborne Division
Fort Bragg, N.C.
COL Patrick Hynes
CSM Butler J. Kendrick

3rd IBCT (Airborne), 82nd Airborne Division
Fort Bragg, N.C.
COL Michael Fenzel
CSM Nicholas A. Rolling

4th IBCT (Airborne), 82nd Airborne Division
Fort Bragg, N.C.
COL Brian Mennes
CSM William D. Forro

Combat Aviation Brigade, 82nd Airborne Division
Fort Bragg, N.C.
COL Terry J. Jamison Jr.
CSM Larry D. Farmer

82nd Sustainment Brigade
Fort Bragg, N.C.
COL Christopher Sharpsten
CSM Edward Bell

16th Military Police Brigade
Fort Bragg, N.C.
COL Chad McRee
CSM Todd Spradling

20th Engineer Brigade
Fort Bragg, N.C.
COL James Raymer
CSM Dewayne Keel

44th Medical Brigade
Fort Bragg, N.C.
COL Jeffrey J. Johnson
CSM Stephen Maldonado

108th Air Defense Artillery Brigade (32nd AAMDC)
Fort Bragg, N.C.
COL Sean Gainey
CSM Harold Lincoln

525th Battlefield Surveillance Brigade
Fort Bragg, N.C.
COL Xavier Brunson
CSM Sheryl D. Lyon

18th Fires Brigade (Airborne)
Fort Bragg, N.C.
COL Robert Morschauser
CSM Steven L. Payton

101st Airborne Division (Air Assault)
Fort Campbell, Ky.
MG James C. McConville
CSM Alonzo J. Smith

1st IBCT, 101st Airborne Division
Fort Campbell, Ky.
COL Joseph P. McGee
CSM Thomas Guglielmo

2nd IBCT, 101st Airborne Division
Fort Campbell, Ky.
COL Daniel Walrath
CSM Brandon Haywood

3rd IBCT, 101st Airborne Division
Fort Campbell, Ky.
COL R.J. Lillibridge
CSM Eric Crabtree

4th IBCT, 101st Airborne Division
Fort Campbell, Ky.
COL Valery Keaveny
CSM William Hambrick

101st Combat Aviation Brigade
Fort Campbell, Ky.
COL Paul Bontrager
CW5 Robert W. Purdy
CSM Harold Plattenberg

159th Combat Aviation Brigade
Fort Campbell, Ky.
COL Jimmy Blackmon
CW5 Guillermo J. Soto Jr.
CSM Ronald Dvorsky

101st Sustainment Brigade
Fort Campbell, Ky.
COL Charles Hamilton
CSM Eugene Thomas

20th Support Command (CBRNE)
Aberdeen Proving Ground, Md.
BG (P) Leslie C. Smith
CSM David M. Puig

48th Chemical Brigade
Fort Hood, Texas
COL Maria T. Zumwalt
CSM Kenneth M. Graham

52nd Ordnance Group
Fort Campbell, Ky.
COL Marue Quick
CSM Robert L. Hockstedler

71st Ordnance Group
Fort Carson, Colo.
COL William McDonough
CSM Michael Woods

National Training Center (NTC)
Fort Irwin, Calif.
BG Terry Ferrell
CSM Lance P. Lehr

916th Support Brigade
Fort Irwin, Calif.
COL James Kazmierczak
CSM James Huggins

11th Armored Cavalry Regiment
Fort Irwin, Calif.
COL Christopher Kolenda
CSM Stephan J. Travers

Joint Readiness Training Center (JRTC)
Fort Polk, La.
BG Clarence K.K. Chinn
CSM LaMarquis Knowles

162nd Infantry Brigade
Fort Polk, La.
COL Matthew McKenna
CSM Pete Smith

1st Maneuver Enhancement Brigade
Fort Polk, La.
COL Bret VanCamp
CSM Edward E. Russell

Air Traffic Services Command
Fort Rucker, Ala.
COL Michael L. Shenk
CSM Richard A. Mitchell

164th Theater Airfield Operations Group
Fort Rucker, Ala.
COL James R. Macklin Jr.
CSM Jorge O. Soriano

3rd Sustainment Command (Expeditionary)
Fort Knox, Ky.
BG Kristin K. French
CSM Karl A. Roberts Sr.

7th Sustainment Brigade
JB Langley-Eustis, Va.
COL Lawrence Kominiak
CSM Tony Escalano

49th Quartermaster Group
Fort Lee, Va.
COL Rodney D. Fogg
CSM Jay A. Porter

11th Theater Tactical Signal Brigade
Fort Huachuca, Ariz.
COL Patrick Dedham
CSM Earl Allen

35th Theater Tactical Signal Brigade
Fort Gordon, Ga.
COL Thomas A. Pugh
CSM Angel Ramos

TRAINING AND DOCTRINE COMMAND

Headquarters
JB Langley-Eustis, Va.
GEN Robert W. Cone
CSM Daniel A. Dailey

Combined Arms Center
Fort Leavenworth, Kan.
LTG David G. Perkins
CSM Christopher K. Greca

Army Capabilities Integration Center
JB Langley-Eustis, Va.
LTG Keith C. Walker
CSM Tyrone Johnson

Initial Military Training Center of Excellence
JB Langley-Eustis, Va.
MG Bradley W. May
CSM John R. Calpena

Recruiting Command
Fort Knox, Ky.
MG David L. Mann
CSM Todd Moore

1st Recruiting Brigade
Fort Meade, Md.
COL Ricky N. Emerson
CSM Stephen E. Bowens

2nd Recruiting Brigade
Redstone Arsenal, Ala.
COL Michael A. Faruqui
CSM Milton Rhodie

3rd Recruiting Brigade
Fort Knox, Ky.
COL John E. Box
CSM Allen Simmons

5th Recruiting Brigade
San Antonio, Texas
COL Lionel W. Magee Jr.
CSM Maurice A. Thorpe

6th Recruiting Brigade
North Las Vegas, Nev.
COL Gregory D. Lautner
CSM Ernest J. Sanchez

Medical Recruiting Brigade
Fort Knox, Ky.
COL Karrie A. Fristoe
CSM Manuel D. Atencio

Cadet Command
Fort Knox, Ky.
MG Jefforey A. Smith
CSM Roger Howard

1st Reserve Officers' Training Corps
Fort Knox, Ky.
COL Michael Blahovec
CSM Darin Smith
(ROTC) Brigade

2nd ROTC Brigade
JB McGuire-Dix-Lakehurst, N.J.
COL Twala D. Mathis
CSM Oscar Arroyo

3rd ROTC Brigade
Great Lakes Naval Station, Ill.
COL Dean P. Shultis
CSM Richard K. Johnson

4th ROTC Brigade
Fort Bragg, N.C.
COL Peter Edmonds
SGM Steven Ziebarth

5th ROTC Brigade
Fort Sam Houston, Texas
COL James Dodson
CSM Keith Moore

6th ROTC Brigade
Hunter Army Airfield, Ga.
COL Brent Barnes
CSM Douglas Pallister

7th ROTC Brigade
Fort Knox, Ky.
COL Leona Knight
CSM Edward Mitchell

8th ROTC Brigade
JB Lewis-McChord, Wash.
COL John A. Kelly
CSM Richard Leirdahl

Adjutant General School
Fort Jackson, S.C.
COL Todd Garlick
CW5 Coral J. Jones
CSM Christopher D. Culbertson

Air Defense Artillery School
Fort Sill, Okla.
COL Donald G. Fryc
CW5 Herman O. Burton
CSM James T. Carr

Armor School
Fort Benning, Ga.
COL Paul Laughlin
CSM Miles Wilson

Army Training Center
Fort Jackson, S.C.
BG Bryan T. Roberts
CSM Kevin R. Benson

Aviation Center of Excellence
Fort Rucker, Ala.
MG Kevin W. Mangum
CW5 Michael L. Reese
CSM James H. Thomson

128th Aviation Brigade (Aviation Logistics School)
JB Langley-Eustis, Va.
COL Dean D. Heitkamp
CSM Lloyd G. Morant

Chaplain School
Fort Jackson, S.C.
Ch. (COL) David J. Colwell
CSM Chantel Sena-Diaz

Chemical, Biological, Radiological and Nuclear School
Fort Leonard Wood, Mo.
BG Peggy C. Combs
CSM Gabriel Arnold

Combined Arms Center-Training
Fort Leavenworth, Kan.
COL (P) Michael D. Lundy
SGM Donald L. Rose Jr.

Combined Arms Support Command/ Sustainment Center of Excellence
Fort Lee, Va.
MG Larry D. Wyche
CW5 Michael J. Wichterman
CSM James E. Riddick

Command and General Staff College
Fort Leavenworth, Kan.
LTG David G. Perkins
BG Gordon B. Davis Jr.
CW5 Robert K. Lamphear
CSM Joe B. Parson Jr.

Defense Language Institute Foreign Language Center
Presidio of Monterey, Calif.
COL Danial D. Pick
CSM Alan Pendergast

Drill Sergeant School
Fort Jackson, S.C.
CSM Michael McCoy

Engineer School
Fort Leonard Wood, Mo.
BG Peter (Duke) DeLuca
CW5 Scott R. Owens
CSM T.W. Murphy

Field Artillery School
Fort Sill, Okla.
BG Brian J. McKiernan
CW5 Robert R. Whigham
CSM Sam K. Young

Financial Management School
Fort Jackson, S.C.
COL Troy A. Clay
CSM Jeffrey C. Green

Fires Center of Excellence
Fort Sill, Okla.
MG James M. McDonald
CSM Dwight Morrisey

Infantry School
Fort Benning, Ga.
COL David Haight
CSM Timothy Guden

Intelligence Center of Excellence
Fort Huachuca, Ariz.
MG Gregg C. Potter
CW5 Joe D. Okabayashi
CSM Todd S. Holiday

Army Logistics University
Fort Lee, Va.
John E. Hall

Army Management Staff College
Fort Belvoir, Va.
Bruce Jaeger

Maneuver Center of Excellence
Fort Benning, Ga.
MG H.R. McMaster
CSM James Carabello

Maneuver Support Center of Excellence
Fort Leonard Wood, Mo.
MG Mark W. Yenter
CSM Robert Wells

Military Police School
Fort Leonard Wood, Mo.
BG Mark S. Inch
CW5 Leroy Shamburger
CSM John F. McNeirney

Mission Command Center of Excellence
Fort Leavenworth, Kan.
COL James Rainey

Ordnance School
Fort Lee, Va.
COL Edward M. Daly
CW5 Terry W. Hetrick
CSM Sultan A. Muhammad

Physical Fitness School
Fort Jackson, S.C.
Frank A. Palkoska

Quartermaster School
Fort Lee, Va.
COL John O'Neil
CW5 Wade H. Lovorn
CSM James K. Sims

Recruiting and Retention School
Fort Jackson, S.C.
LTC (P) Terrance L. Murrill
CSM Tory D. Hendrieth

School of Music
Virginia Beach, Va.
LTC Andrew Esch
CSM Joseph A. Camarda

Sergeants Major Academy
Fort Bliss, Texas
CSM Rory L. Malloy

Signal Center of Excellence
Fort Gordon, Ga.
MG LaWarren (Warren) V. Patterson
CW5 Todd M. Boudreau
CSM Ronald Pflieger

Soldier Support Institute
Fort Jackson, S.C.
BG David K. (Mac) MacEwen
CSM Annette R. Weber

TRADOC Analysis Center
Fort Leavenworth, Kan.
Pamela Blechinger

Army Training Support Center
JB Langley-Eustis, Va.
COL Sharon H. Baker
SGM Robert J. French

Transportation School
Fort Lee, Va.
BG Stephen E. Farmen
CW5 Thomas J. Wilson
CSM Allen B. Offord Jr.

War College
Carlisle Barracks, Pa.
MG Anthony A. Cucolo III

Warrant Officer Career College
Fort Rucker, Ala.
COL Stanley O. Smith
CW5 Michael R. Funk

Western Hemisphere Institute for Security Cooperation
Fort Benning, Ga.
COL Glenn R. Huber Jr.
CSM Julio Candelario

ARMY MATERIEL COMMAND

Headquarters
Redstone Arsenal, Ala.
GEN Dennis L. Via
CSM Ronald T. Riling

Army Contracting Command
Redstone Arsenal, Ala.
MG Camille M. Nichols
CSM John L. Murray

Army Sustainment Command
Rock Island Arsenal, Ill.
BG John F. Wharton
CSM James E. Spencer

Aviation and Missile Life Cycle Management Command
Redstone Arsenal, Ala.
MG Lynn A. Collyar
CSM Tod L. Glidewell

Communications-Electronics Command Life Cycle Management Command
Aberdeen Proving Ground, Md.
MG Robert S. Ferrell
CSM Kennis J. Dent

Chemical Materials Agency
Aberdeen Proving Ground, Md.
Donald E. Barclay

Joint Munitions Command
Rock Island Arsenal, Ill. &
Joint Munitions and Lethality Life Cycle Management Command
Picatinny Arsenal, N.J.
BG Kevin G. O'Connell
CSM Anthony M. Bryant

TACOM Life Cycle Management Command
Warren, Mich.
MG Kurt J. Stein
CSM Clinton G. Hall

Military Surface Deployment and Distribution Command
Scott AFB, Ill.
MG Thomas J. Richardson
CSM Cedric J. Thomas

Research, Development and Engineering Command
Aberdeen Proving Ground, Md.
Dale A. Ormond
CSM Lebert O. Beharie

Army Security Assistance Command
Redstone Arsenal, Ala.
MG Frank Turner
CSM Rodger W. Mansker

Logistics Support Activity
Redstone Arsenal, Ala.
COL Robert P. Sullivan

U.S. ARMY EUROPE

USAREUR
Heidelberg, Germany
LTG Mark P. Hertling
CSM David S. Davenport

V Corps
Wiesbaden, Germany
LTG James L. Terry
CSM William M. Johnson

170th IBCT
Baumholder, Germany
COL Mark D. Raschke
CSM James A. Ackerman

172nd IBCT
Grafenwöhr, Germany
COL Edward Bohnemann
CSM Michael W. Boom

173rd Airborne Brigade Combat Team
Vicenza, Italy
COL Andrew Rohling
CSM Samuel D. Coston

2nd Cavalry Regiment
Vilseck, Germany
COL Keith A. Barclay
CSM Malcolm Parrish

12th Combat Aviation Brigade
Katterbach, Germany
COL Van J. Voorhees Jr.
CW5 Michael K. Apple
CSM Micheal Clowser

10th Air and Missile Defense Command
Kaiserslautern, Germany
COL Stephen J. Richmond
CSM Darrin L. Jefferies

21st Theater Sustainment Command
Kaiserslautern, Germany
MG Aundre Piggee
CSM Michael A. Sanchez

7th Civil Support Command
Kaiserslautern, Germany
BG Mark Stephen Hendrix
CSM Michael E. Biere

16th Sustainment Brigade
Bamberg, Germany
COL Darren Werner
CSM Ismael Rodriguez

18th Engineer Brigade
Schweinfurt, Germany
COL Scott Peterson
CSM Lauro F. Obeada

18th Military Police Brigade
Sembach, Germany
COL Brian Bisacre
CSM Brenda K. Curfman

266th Finance Center
Kaiserslautern, Germany
COL Thomas J. Seelig
SGM Tommy A. Byrd

405th Army Field Support Brigade
Kaiserslautern, Germany
COL Christopher Roscoe
CSM Bryan Kroontje

U.S. Army Africa-U.S. Army Southern European Task Force
Vicenza, Italy
MG Patrick J. Donahue
CSM Hu B. Rhodes

Joint Multinational Training Command
Grafenwöhr, Germany
COL Bryan L. Rudacille
CSM Dennis C. Zavodsky

U.S. Army Joint Multinational Readiness Center
Hohenfels, Germany
COL John Norris
CSM Eric Dostie

5th Signal Command
Wiesbaden, Germany
BG Bruce T. Crawford
CSM Gerald L. Tyce

2nd Signal Brigade
Wiesbaden, Germany
COL Jimmy L. Hall
CSM Milton Weatherly

7th Theater Tactical Signal Brigade
Schweinfurt, Germany
COL Geoffrey Mangelsdorf
CSM Stephon Watson

66th Military Intelligence Brigade
Wiesbaden, Germany
COL Kenneth A. Rector
CSM Marc Scott

202nd Military Police Group (CID)
Kleber Kaserne, Germany
COL Donna W. Martin
MSG Anthony Mason

U.S. Army Europe Regional Medical Command
Heidelberg, Germany
COL Jeffrey Clark
CSM Robert C. Luciano

30th Medical Command
Heidelberg, Germany
COL Koji D. Nishimura
CSM Alexis A. King

Heidelberg Medical Department Activity
Heidelberg, Germany
LTC Rachel Smith
CSM Michael S. Mullen

Landstuhl Regional Medical Center
Landstuhl, Germany
COL Barbara Holcomb
CSM Michael Gragg

Bavaria Medical Department Activity
Vilseck, Germany
COL Robert Goodman
CSM Napoleon Noguerapayan

U.S. Army Public Health Command Region Europe
Landstuhl, Germany
COL Daniel H. Jimenez
SGM Erik P. Holland

U.S. Army Medical Materiel Center-Europe
Pirmasens, Germany
COL Thomas C. Slade
SGM James Chambers

U.S. Army Europe Regional Veterinary Command
Heidelberg, Germany
COL Jack M. Wedam

U.S. Army Regional Dental Command
Heidelberg, Germany
(Unnamed Backfill)
SGM Darleen Taylor

409th Contracting Support Brigade
Kaiserslautern, Germany
COL William Bailey
SGM Bentura Fernandez

Task Force Falcon
Camp Bondsteel, Kosovo
MAJ Matthew McDermott
CSM Ernestine Judge

19th Battlefield Coordination Detachment
Ramstein, Germany
COL Steven Hite
SGM Ralph L. Phillips

U.S. Army NATO Brigade
Sembach, Germany
COL Robert Larsen
CSM Joanne Cox

THIRD ARMY/U.S. ARMY CENTRAL

Headquarters
Shaw AFB, S.C.
LTG Vincent K. Brooks
CSM Stephan Frennier

1st Theater Sustainment Command
Fort Bragg, N.C.
MG Kurt Stein
CSM Charles M. Tobin

18th Financial Management Center
Fort Bragg, N.C.
COL Darrell Brimberry
CSM Keith Madison

Area Support Group-Kuwait
Camp Arifjan, Kuwait
COL Robert G. Cheatham Jr.
CSM David L. Pierce

Area Support Group-Qatar
Camp As Sayliyah, Qatar
COL Wayne Grieme
CSM Charles A. Holliday

4th Battlefield Coordination Detachment
Shaw Air Force Base, S.C.
COL Benjamin Matthews
SGM Reginald Allen

Task Force Sinai
Sinai Peninsula, Egypt
COL Monty L. Willoughby
CSM Richard Green

335th Signal Command
Atlanta, Ga.
MG Steven W. Smith
CSM Royd R. Patterson

513th Military Intelligence Brigade
Fort Gordon, Ga.
COL Barry Harris
CSM John R. Plaster

11th Air Defense Artillery Brigade
Fort Bliss, Texas
COL Reginald Davis
CSM Byron Ferguson

3rd Medical Command (Deployment Support)
Atlanta, Ga.
COL Danny C. Baldwin
SGM James F. Moody

401st Army Field Support Brigade
Afghanistan
COL Michael M. Russell
CSM Ramon C. Caisido

U.S. ARMY NORTH (FIFTH ARMY)

Headquarters
Fort Sam Houston/JB San Antonio, Texas
LTG William B. Caldwell IV
CSM David D. Wood

U.S. ARMY SOUTH

Headquarters
Fort Sam Houston/JB San Antonio, Texas
MG Frederick S. Rudesheim
CSM Gabriel Cervantes

U.S. ARMY PACIFIC

Headquarters
Fort Shafter, Hawaii
LTG Francis J. Wiercinski
CSM Frank M. Leota

25th Infantry Division
Schofield Barracks, Hawaii
MG William K. Fuller
CSM Ray Devens

2nd SBCT, 25th Infantry Division
Schofield Barracks, Hawaii
COL Thomas H. Mackey
CSM Michael A. Crosby

3rd IBCT, 25th Infantry Division
Schofield Barracks, Hawaii
COL Brian S. Eifler
CSM David M. Clarke

Combat Aviation Brigade 25th Infantry Division
Wheeler Army Airfield, Hawaii
COL Frank W. Tate
CW4 Joseph B. Roland
CSM Jesus Ruiz

8th Theater Sustainment Command
Fort Shafter, Hawaii
MG Stephen R. Lyons
CSM Nathan J. Hunt III

45th Sustainment Brigade
Schofield Barracks, Hawaii
COL Jeffrey W. Drushal
CSM Roger O. Bynoe

10th Area Support Group
Torii Station, Okinawa, Japan
COL Sheila Bryant
CSM Shelton Williamson

8th Military Police Brigade
Schofield Barracks, Hawaii
COL Mark A. Jackson
CSM Richard A. Woodring

130th Engineer Brigade
Schofield Barracks, Hawaii
COL Diana M. Holland
CSM John W. Etter Jr.

311th Signal Command
Fort Shafter, Hawaii
MG James T. Walton
CSM Kevin J. Thompson

516th Signal Brigade
Fort Shafter, Hawaii
COL Scott D. Baer
CSM Travis L. Cherry

94th Army Air & Missile Defense Command
Fort Shafter, Hawaii
BG Daniel L. Karbler
CSM Tedd J. Pritchard

18th Medical Command
Fort Shafter, Hawaii
COL Judith A. Bock
CSM Garfield D. Skyers

500th Military Intelligence Brigade
Schofield Barracks, Hawaii
COL William Mangan
CSM Dan S. McCraw Jr.

196th Infantry Brigade (Training Support)
Fort Shafter, Hawaii
COL Michael J. Forsyth
CRM Norman G. Corbett

413th Contracting Support Brigade
Fort Shafter, Hawaii
COL Martin A. Zybura
CSM Douglas L. Adams

U.S. Army Japan/I Corps FWD
Camp Zama, Japan
MG Michael T. Harrison
CSM James Norman

U.S. Army Alaska (USARAK)
JB Elmendorf-Richardson (JB-ER), Alaska
MG Michael X. Garrett
CSM Bernard L. Knight

1st SBCT, 25th Infantry Division
Fort Wainwright, Alaska
COL Brian Reed
CSM Ray R. Lewis

4th IBCT (Airborne), 25th Infantry Division
JB-ER, Alaska
COL Morris T. Goins
CSM Terry D. Gardner

2nd Engineer Brigade
JB-ER, Alaska
COL Thomas J. Roth
CSM Antonio S. Jones

Installation Management Command-Pacific Region
Fort Shafter, Hawaii
Debra D. Zedalis, SES, Director
CSM Karl E. Schmitt

U.S. Army Garrison-Hawaii
Wheeler Army Airfield, Hawaii
COL Daniel W. Whitney
CSM Philip J. Brunwald

U.S. Army Garrison-Japan
Honshu, Japan
COL Eric D. Tilley
CSM Katarina M. Najee

JB-ER, Alaska
(673rd Air Base Wing)
COL William Huber
(Vacant)

U.S. Army Garrison, Fort Greely
Fort Greely, Alaska
LTC Terry L. Clark
CSM Robert D. Gooden

U.S. Army Garrison, Fort Wainwright
Fort Wainwright, Alaska
COL Ronald M. Johnson
CSM Harry W. Jeffries

ARMY SPECIAL OPERATIONS COMMAND

Headquarters
Fort Bragg, N.C.
LTG Charles T. Cleveland
MG Paul J. LaCamera
CSM George A. Bequer

U.S. Army Special Forces Command (Airborne)
Fort Bragg, N.C.
BG Christopher Haas
CW5 Douglas Frank
CSM William B. Zaiser

1st Special Forces Group (Airborne)
JB Lewis-McChord, Wash.
COL Robert McDowell
COL Brian Vines
CW5 Richard R. Kunz
CSM Frank Guilliand

3rd Special Forces Group (Airborne)
Fort Bragg, N.C.
COL Patrick B. Roberson
COL Paul H. Dinter
CW5 Robert Hash
CSM Richard P. Meffert

5th Special Forces Group (Airborne)
Fort Campbell, Ky.
COL Scott E. Brower
CW5 John C. Veltri
CSM Dwayne H. Cox

7th Special Forces Group (Airborne)
Eglin AFB, Fla.
COL Antonio Fletcher
COL Miguel Howe
CW5 Tommy Austin
CSM Brian Edwards

10th Special Forces Group (Airborne)
Fort Carson, Colo.
LTC John B. Deedrick Jr.
LTC Michael G. Lazich
CW5 Alan W. Bowden
CSM Jason Krider

19th Special Forces Group (Airborne) (National Guard)
Draper, Utah
COL Steven Watt
CW5 Osvaldo Soto
CSM Bruce Bollinger

20th Special Forces Group (Airborne) (National Guard)
Birmingham, Ala.
COL Randall M. Zeegers
CW5 Gabriel J. Ambrozaitis
CSM David Wolff

JFK Special Warfare Center and School
Fort Bragg, N.C.
MG Edward M. Reeder
BG Ferdinand Iriazarry
CW5 Tony L. Fox
CSM Ledford Stigall

1st Special Warfare Training Group (Airborne)
Fort Bragg, N.C.
COL B. Ashton Naylor Jr.
CW5 Robert Hart
CSM Channing C. Bell

Special Warfare Medical Group (Airborne)
Fort Bragg, N.C.
COL Sean Lee
CSM (Vacant)

75th Ranger Regiment
Fort Benning, Ga.
COL Mark W. Odom
CSM Nicholas Bielich II

Army Special Operations Aviation Command
Fort Campbell, Ky.
COL Clayton M. Hutmacher
COL Paul J. Ambrose
CW5 Robert W. Witzler
CSM David L. Leamon

160th Special Operations Aviation Regiment (Airborne)
Fort Campbell, Ky.
COL John Evans
CW5 Ivan Murdock
CSM Gregory Chambers

95th Civil Affairs Brigade (Airborne)
Fort Bragg, N.C.
COL James C. Brown
CSM Tony Duncan

Military Information Support Group (Airborne)
Fort Bragg, N.C.
COL Reginald J. Bostick
CSM Fernan T. Castelo

528th Sustainment Brigade (Special Operations) (Airborne)
Fort Bragg, N.C.
COL Thomas J. Rogers
CSM Bobby Hagy

112th Special Operations Signal Battalion (Airborne)
Fort Bragg, N.C.
LTC Jeth B. Rey
CSM Frank G. Gutierrez

EIGHTH ARMY

Headquarters
Seoul, South Korea
LTG John D. Johnson
CSM Rodney Harris

2nd Infantry Division
U.S. Army Garrison (USAG) Red Cloud, South Korea
MG Edward C. Cardon
CSM Michael Eyer

1st HBCT, 2nd Infantry Division
USAG Hovey, South Korea
COL Louis B. Rago
CSM Raul Huerta

2nd Combat Aviation Brigade, 2nd Infantry Division
USAG Humphreys, South Korea
COL James T. Barker
CW5 John M. Dowling
CSM Powell L. Barrios

210th Fires Brigade, 2nd Infantry Division
USAG Casey, South Korea
COL Tracy P. Banister
CSM Carlos E. Esmurriadiaz

65th Medical Brigade
Seoul, South Korea
COL Kelly Murray
CSM Leon L. Archer Jr.

19th Sustainment Command (Expeditionary)
Daegu, South Korea
BG Paul C. Hurley
CSM Austin R. Robert

501st Sustainment Brigade
USAG Red Cloud, South Korea
COL Mark J. Weinerth
CSM Spencer L. Gray

501st Military Intelligence Brigade
Seoul, South Korea
COL Jason Chung
CSM Tony R. Downs

Materiel Support Center-Korea
USAG Carroll, South Korea
COL John P. Chadbourne
Deputy Cmdr. Gale L. Winchester

35th Air Defense Artillery Brigade
Osan Air Force Base, South Korea
COL Eric L. Sanchez
CSM Jerome Wiggins

1st Signal Brigade
Yongsan, South Korea
COL Paul Fredenburgh
CSM Darris Curry

411th Contracting Support Brigade
Yongsan, South Korea
COL Frederick A. Puthoff
SGM Jesse T. Hammond Jr.

175th Financial Management Center
Yongsan, South Korea
COL Carolyn R. Sharpe
SGM Rhonda Safford

U.S. Army Garrison-Red Cloud
Uijeongbu, South Korea
COL John M. Scott
CSM Michael L. Hatfield

U.S. Army Garrison-Yongsan
Seoul, South Korea
COL William P. (Bill) Huber
CSM Daniel Willing

U.S. Army Garrison-Humphreys
South Korea
COL Darrin Conkright
CSM Kristine A. Purnell

U.S. Army Garrison-Daegu
Camp Henry, South Korea
COL Kathleen Gavle
MSG Troy Parnell (Acting)

ARMY SPACE AND MISSILE DEFENSE COMMAND/ARMY FORCES STRATEGIC COMMAND

Headquarters
Redstone Arsenal, Ala.
LTG Richard P. Formica
CSM Larry S. Turner

Deputy to the Commander
Redstone Arsenal, Ala.
Ronald E. Chronister

Deputy Commander (Operations)
Peterson Air Force Base, Colo.
BG Timothy R. Coffin

Space and Missile Defense Technical Center
Redstone Arsenal, Ala.
Debra G. Wymer

Space and Missile Defense Future Warfare Center
Redstone Arsenal, Ala.
Laurence H. Burger

1st Space Brigade
Colorado Springs, Colo.
COL James Meisinger
CSM Thomas L. Eagan

100th Missile Defense Brigade Ground-based Midcourse Defense
Peterson Air Force Base, Colo.
COL Gregory S. Bowen
CSM Russell A. Hamilton

Army Space Personnel Development Office
Colorado Springs, Colo.
Michael C. Connolly

Army Astronaut Detachment
Johnson Space Center, Houston, Texas
COL Douglas H. Wheelock

U.S. Army Kwajalein Atoll and Ronald Reagan Ballistic Missile Defense Test Site
Republic of the Marshall Islands
COL Shannon Boehm

MILITARY SURFACE DEPLOYMENT AND DISTRIBUTION COMMAND

Headquarters
Scott AFB, Ill.
MG Thomas J. Richardson
CSM Cedric J. Thomas

595th Transportation Group-Forward
Camp Arifjan, Kuwait
COL Andrew C. Peters
CSM Alveno M. Hodge

596th Transportation Group
Sunny Point, N.C.
COL James A. Rupkalvis
CSM Felton L. Head

597th Transportation Group
JB Langley-Eustis, Va.
COL Charles R. Brown
CSM Kenneth G. Blasko

598th Transportation Group
Sembach, Germany
COL Matthew D. Redding
CSM Cynthia B. Howard

599th Transportation Group
Wheeler Army Airfield, Hawaii
COL Gust W. Pagonis
CSM Kevin A. McKeller

Transportation Engineering Agency
Scott AFB, Ill.
Bruce A. Busler

Deployment Support Command, USAR
Birmingham, Ala.
COL (P) Michael A. Mann
CSM Maryeva Beesley

ARMY ACQUISITION ORGANIZATIONS

U.S. Army Acquisition Support Center
Headquarters-Fort Belvoir, Va.
Craig A. Spisak

Joint Program Executive Office for Chemical and Biological Defense
Headquarters-Aberdeen Proving Ground, Md.
BG Jess A. Scarbrough

Joint Program Executive Office for Joint Tactical Radio System
Headquarters-San Diego, Calif.
BG Michael E. Williamson

Program Executive Office for Ammunition
Headquarters-Picatinny Arsenal, N.J.
BG Jonathan A. Maddux

Program Executive Office for Aviation
Headquarters-Redstone Arsenal, Ala.
MG William T. Crosby

Program Executive Office for Command, Control, Communications-Tactical
Headquarters-Aberdeen Proving Ground, Md.
MG N. Lee S. Price

Program Executive Office for Combat Support & Combat Service Support
Headquarters-Warren, Mich.
Kevin M. Fahey

Program Executive Office for Enterprise Information Systems
Headquarters-Fort Belvoir, Va.
Douglas K. Wiltsie

Program Executive Office for Ground Combat Systems
Headquarters-Warren, Mich.
Scott J. Davis

Program Executive Office for Intelligence, Electronic Warfare & Sensors
Headquarters-Aberdeen Proving Ground, Md.
Stephen D. Kreider (Acting)

Program Executive Office for Missiles and Space
Headquarters-Redstone Arsenal, Ala.
BG Ole A. Knudson

Program Executive Office, Soldier
Headquarters-Fort Belvoir, Va.
BG Paul A. Ostrowski

Program Executive Office for Simulation, Training, and Instrumentation
Headquarters-Orlando, Fla.
James T. Blake

Program Executive Office for Assembled Chemical Weapons Alternatives
Headquarters-Aberdeen Proving Ground, Md.
Conrad F. Whyne

CORPS OF ENGINEERS

Headquarters
Washington, D.C.
LTG Thomas P. Bostick
MG Todd T. Semonite
CSM Karl J. Groninger

Deputy Commanding General for Military and International Operations
MG Kendall P. Cox

Deputy Commanding General for Civil and Emergency Operations
MG Michael J. Walsh

Director of Military Programs
Robert E. Slockbower

Director of Civil Works
Steven L. Stockton

Great Lakes and Ohio River Division
Cincinnati, Ohio
BG Margaret W. Burcham

Mississippi Valley Division
Vicksburg, Miss.
MG John W. Peabody

North Atlantic Division
New York, N.Y.
COL Kent D. Savre

Northwestern Division
Portland, Ore.
COL Robert A. Tipton

Pacific Ocean Division
Honolulu, Hawaii
BG Richard L. Stevens

South Atlantic Division
Atlanta, Ga.
COL Donald E. Jackson Jr.

South Pacific Division
San Francisco, Calif.
BG Mike Wehr

Southwestern Division
Dallas, Texas
BG Thomas W. Kula

Transatlantic Division
Winchester, Va.
MG Michael Eyre

Army Geospatial Center
Fort Belvoir, Va.
Joseph F. Fontanella

U.S. Army Engineer Research and Development Center
Vicksburg, Miss.
COL Kevin J. Wilson

U.S. Army Engineering and Support Center
Huntsville, Ala.
COL Nello Tortora

249th Engineer Battalion (Prime Power)
Fort Belvoir, Va.
LTC Calvin Hudson

CRIMINAL INVESTIGATION COMMAND

Headquarters
Quantico, Va.
MG David E. Quantock
CSM Thomas J. Seaman

3rd Military Police Group (CID)
Hunter Army Airfield, Ga.
COL Thomas H. Bird
CSM Andre Proctor

6th Military Police Group (CID)
JB Lewis-McChord, Wash.
COL Robert Burk
CSM Timothy S. Fitzgerald

202nd Military Police Group (CID)
Kaiserslautern, Germany
COL Donna Martin
CSM Dennis Higgins

701st Military Police Group (CID)
Quantico, Va.
COL John G. Voorhees
CSM Crystal Wallace

U.S. Army Crime Records Center
Quantico, Va.
Susan Cugler

U.S. Army Criminal Investigation Laboratory
Gillem Enclave, Ga.
Larry C. Chelko

INSTALLATION MANAGEMENT COMMAND

Headquarters
JB San Antonio, Texas
LTG Michael Ferriter
Joe C. Capps, SES, Exec. Dir.
CSM Earl L. Rice

JB Myer-Henderson Hall, Va.
COL Fern O. Sumpter
CSM Earlene Y. Lavender

USAG Fort A.P. Hill
LTC Peter E. Dargle
CSM Keith R. Whitcomb

USAG Fort Belvoir, Va.
COL Gregory D. Gadson
CSM Chester Grelock

USAG Fort Hamilton, N.Y.
COL Eluyn Gines
CSM Hector A. Prince

USAG Carlisle Barracks, Pa.
LTC William McDonough
CSM Robert Blakey

USAG Fort Meade, Md.
COL Edward C. Rothstein
SGM Thomas J. Latter

USAG West Point, N.Y.
COL Dane D. Rideout
CSM Kevin Fauntleroy

USAG Miami, Fla.
Mignon S. (Scottie) Moore

USAG Fort Leavenworth, Kan.
COL Timothy Wulff
CSM Jeffrey Crawford

USAG Presidio of Monterey, Calif.
COL Joel J. Clark
CSM Olga Martinez

USAG Soto Cano, Honduras
COL Barry Graham
CSM Lee Markwell

USAG Fort Detrick, Md.
COL Allen J. Darden Sr.
CSM Cassandra D. Redd

ATLANTIC REGION
JB Langley-Eustis, Va.
Davis D. Tindoll, SES, Director
CSM Kevin D. Sharkey

JB Langley-Eustis, Va.
USAG Fort Eustis
COL Thomas Wetherington
CSM Jesse L. Sharp

JB McGuire-Dix-Lakehurst, N.J. (Army Support Activity Dix)
COL Jeffrey A. Doll
CSM Steven Whittaker

USAG Aberdeen Proving Ground, Md.
COL Gregory R. McClinton
CSM James E. Ervin

USAG Adelphi Laboratory Center, Md.
Joseph F. Watson

USAG Fort Devens, Mass.
LTC Steven F. Egan
CSM Donald U. Thelen

USAG Fort Drum, N.Y.
COL Gary A. Rosenburg
CSM Mark Oldroyd

USAG Fort Lee, Va.
COL Rodney Edge
CSM Sheila R. Nelson

USAG Picatinny Arsenal, N.J.
LTC Jason C. Mackay
CSM Dewey Blake

USAG Rock Island Arsenal, Ill.
Joel Himsl

U.S. Army Soldier Systems Center Natick, Mass.
LTC Frank Sobchak
CSM Brian Warren

USAG Fort Benning, Ga.
COL Jeffrey Fletcher
CSM Mark Moore

USAG Fort Bragg, N.C.
COL Jeffrey M. Sanborn
CSM Samuel B. Campbell

USAG Fort Buchanan, Puerto Rico
COL Caryn S. Heard
CSM Derrick Simpson

USAG Fort Campbell, Ky.
COL David L. (Buck) Dellinger
CSM Steven W. Bower

USAG Fort Gordon, Ga.
COL Robert A. Barker
CSM Kenneth Stockton

USAG Hunter Army Airfield, Ga.
LTC Edward Kovaleski
CSM Stanley D. Hood

USAG Fort Jackson, S.C.
COL Michael S. Graese
MSG Willie E. Yarbray Jr. (Acting)

USAG Fort Knox, Ky.
COL Bruce Jenkins
CSM Steven M. Voller

USAG Redstone Arsenal, Ala.
COL John Hamilton
CSM Kyle Crump

USAG Fort Rucker, Ala.
COL Stuart McRae
CSM Buford Nolan

USAG Fort Stewart, Ga.
COL Kevin F. Gregory
CSM Louis C. Felicioni

CENTRAL REGION
JB San Antonio, Texas
J. Randall Robinson, SES, Director
CSM Donald R. Felt

USAG Fort Bliss, Texas
COL Brant Dayley
CSM Philip Pandy

USAG Fort Carson, Colo.
COL David Grosso
CSM James A. Kilpatrick Jr.

USAG Detroit Arsenal, Mich.
Alan Parks

Fort Hunter Liggett, Calif.
COL Donna R. Williams
CSM Kevin W. Newman

USAG Dugway Proving Ground, Utah
Andy Snodgrass
SGM Stanley D. Morton

USAG Fort Hood, Texas
COL Matthew G. Elledge
CSM Douglas R. Gault

USAG Fort Huachuca, Ariz.
COL Dan J. McFarland
CSM Roger N. Daigle Jr.

USAG Fort Irwin, Calif.
COL Kurt Pinkerton
CSM Dale J. Perez

USAG Fort Leonard Wood, Mo.
COL William R. Pfeffer
CSM Jerry F. Faulk

JB Lewis-McChord, Wash.
COL H. Charles Hodges
CSM Ronald Johnson

USAG Fort McCoy, Wis.
COL Steven W. Nott
CSM William T. Bissonette

USAG Fort Riley, Kan.
COL William J. Clark
CSM Colvin Bennett

JB San Antonio, Texas
(502nd Mission Support Group, USAG Fort Sam Houston)
COL John P. Lamoureux
CSM Donald Freemen

USAG Fort Polk, La.
COL Roger Shuck
CSM Ronald Semerena

USAG Fort Sill, Okla.
COL Paul Hossenlopp
CSM Thomas Miller

USAG White Sands Missile Range, N.M.
COL Leo G. Pullar
CSM Glenn Robinson

USAG Yuma Proving Ground, Ariz.
Richard T. Martin
CSM Keith West

EUROPE REGION
Heidelberg, Germany
Kathleen Marin, SES, Director
CSM Jeffrey S. Hartless

USAG Ansbach, Germany
COL Kelly J. Lawler
CSM Leeford C. Cain

USAG Bamberg, Germany
LTC Michelle L. Bienias
CSM Matthew Waldron (Acting)

USAG Baden-Wuerttemburg, Germany
COL Bryan D. DeCoster
CSM Annette R. Weber

USAG Baumholder, Germany
LTC Sam R. McAdoo
CSM Augustus M. Wah

USAG Benelux, Belgium
COL Sergio M. Dickerson
CSM Romeo Montez III

USAG Grafenwöhr, Germany
COL James Saenz
CSM William Berrios

USAG Hohenfels, Germany
LTC John J. Strange Jr.
CSM Kenneth McKoy

USAG Kaiserslautern, Germany
LTC Lars Zetterstrom
CSM Richard Jessup

USAG Schweinfurt, Germany
LTC Michael Runey
CSM Eric Gordon

USAG Stuttgart, Germany
COL John P. Stack
CSM Bernard P. Smalls Sr.

USAG Vicenza, Italy
COL David Buckingham
(Vacant)

USAG Wiesbaden, Germany
COL David H. Carstens
CSM Sa'eed A. Mustafa

PACIFIC REGION
Fort Shafter, Hawaii
Debra D. Zedalis, SES, Director
CSM Karl E. Schmitt

USAG Fort Greely, Alaska
LTC Terry Clark
CSM Robert Gooden

JB Elmendorf-Richardson, Alaska
(673rd Air Base Wing)
COL William P. Huber
(Vacant)

USAG Fort Wainwright, Alaska
COL Ronald M. Johnson
CSM Harry W. Jeffries

USAG Japan–Honshu, Japan
COL Eric Tilley
CSM Katrina M. Najee

USAG Torii Station-Okinawa, Japan
COL Cornell E. Anderton
CSM Kevin P. Nolan

USAG Hawaii–Schofield Barracks, Hawaii
COL Daniel W. Whitney
CSM Philip J. Brumwald

USAG Pohakuloa, Hawaii
LTC Eric P. Shwedo
CSM Alan D. Higgs

USAG Casey, South Korea
LTC Steven D. Finley
(Vacant)

USAG Daegu, South Korea
COL Kathleen Gavle
(Vacant)

USAG Humphreys, South Korea
COL Darin S. Conkright
CSM Kristine A. Purnell

USAG Red Cloud, South Korea
COL John M. Scott
CSM Michael L. Hatfield

USAG Yongsan, South Korea
COL Michael E. Masley
CSM Daniel L. Willing

Army Environmental Command
USAG Fort Sam Houston, Texas
COL Mark Lee
CSM Gene E. Canada

INTELLIGENCE AND SECURITY COMMAND

Headquarters
Fort Belvoir, Va.
MG Stephen G. Fogarty
CSM Panapa R. Willis

1st Information Operations Command (Land)
Fort Belvoir, Va.
COL Jon N. Leonard
SGM David A. Little

66th Military Intelligence Brigade
Wiesbaden, Germany
COL Kenneth A. Rector
CSM Marc Scott

470th Military Intelligence Brigade
Fort Sam Houston, Texas
COL Pierre D Gervais
CSM Charles Totoris

500th Military Intelligence Brigade
Schofield Barracks, Hawaii
COL William J. Mangen
CSM Dan. S. McCraw Jr.

501st Military Intelligence Brigade
Seoul, South Korea
COL Jason A. Chung
CSM Anthony S. Torres

513th Military Intelligence Brigade
Fort Gordon, Ga.
COL Steven D. Breton
CSM Leonard Cordova

704th Military Intelligence Brigade
Fort Meade, Md.
COL Anthony R. Hale
CSM Mark A. Thornton

706th Military Intelligence Group
Fort Gordon, Ga.
COL John M. Swartz
CSM Pedro Ayala

780th Military Intelligence Brigade
Fort Meade, Md.
COL Jennifer Buckner
CSM Lawrence Hoke

902nd Military Intelligence Group
Fort Meade, Md.
COL Yvette C. Hopkins
CSM Mark A. Mathis

National Ground Intelligence Center
Charlottesville, Va.
COL Stephen C. Gomillion
CSM Ronald Mason

U.S. Army Operations Group
Fort Meade, Md.
COL Oliver Cass
SGM Erik Shull

U.S. Army Central Clearance Facility
Fort Meade, Md.
COL Edward J. Fish
SFC Aurora Rodriquez

Joint Surveillance Target Attack Radar System Army Element
Robins Air Force Base, Ga.
COL Todd Morgan
1SG Louis A. Brown III

300th Military Intelligence Brigade (INSCOM Wartrace Unit)
Draper, Utah
COL Derek J. Tollman
CSM Lane Waymont

MEDICAL COMMAND

Headquarters
JB San Antonio, Texas
LTG Patricia D. Horoho
CSM Donna A. Brock

Army Medical Department Center and School
JB San Antonio, Texas
MG Philip Volpe
CSM James E. Diggs

Army Public Health Command
Aberdeen Proving Ground, Md.
MG Jimmie O. Keenan
CSM Gerald C. Ecker

Medical Research and Materiel Command and Fort Detrick
Fort Detrick, Md.
MG James K. Gilman
CSM Kevin B. Stuart

Europe Regional Medical Command
Heidelberg, Germany
COL (P) Jeffrey B. Clark
CSM Robert C. Luciano

Southern Regional Medical Command and Brooke Army Medical Center
JB San Antonio, Texas
MG Ming (Ted) Wong
CSM Marshall L. Huffman

Northern Regional Medical Command
Washington, D.C.
BG Joseph Caravalho Jr.
CSM Benjamin H. Scott Jr.

Western Regional Medical Command
JB Lewis-McChord, Wash.
MG Richard W. Thomas
CSM Cy B. Akana

Pacific Regional Medical Command and Tripler Army Medical Center
Honolulu, Hawaii
BG Keith W. Gallagher
CSM William Franklin

Army Dental Command
Fort Sam Houston, Texas
COL Priscilla Hamilton
CSM William H. O'Neal II

Warrior Transition Command
Arlington, Va.
BG David Bishop
CSM Mark A. Dennis

Eisenhower Army Medical Center
Fort Gordon, Ga.
COL Christopher Castle
CSM Ricky Dean

William Beaumont Army Medical Center
Fort Bliss, Texas
BG Dennis D. Doyle
CSM Matthew Cyr

Carl R. Darnall Army Medical Center
Fort Hood, Texas
COL Patrick D. Sargent
CSM Roger A. Velarde

Landstuhl Regional Medical Center
Landstuhl, Germany
COL Barbara R. Holcomb
CSM Michael L. Gragg

Madigan Army Medical Cener
JB Lewis-McChord, Wash.
COL Michael Heimall (Acting)
CSM Matthew T. Brady

Womack Army Medical Center
Fort Bragg, N.C.
COL Steven Brewster
CSM Michael T. Brooks

U.S. Army Garrison
Fort Detrick, Md.
COL Allan J. Darden
CSM Cassandra D. Redd

MILITARY DISTRICT OF WASHINGTON

Headquarters
Fort McNair, D.C.
MG Michael S. Linnington
CSM David O. Turnbull

Fort A.P. Hill, Va.
LTC Peter E. Dargle
CSM Keith R. Whitcomb

Fort Belvoir, Va.
COL Gregory D. Gadson
CSM Chester D. Grelock

Fort Hamilton, N.Y.
COL Eluyn Gines
CSM Hector A. Prince

Fort Meade, Md.
COL Edward C. Rothstein
SGM Debra McGarity (Acting)

JB Myer-Henderson Hall (Fort Myer, Va.; Fort McNair, Washington, D.C.; & Henderson Hall USMC, Va.)
COL Fern O. Sumpter
CSM Earlene Y. Lavender

3rd U.S. Infantry (The Old Guard)
USAG Fort Myer, Va.
COL James C. Markert
CSM Jeffrey T. Stitzel

The U.S. Army Band "Pershing's Own"
USAG Fort Myer, Va.
COL Thomas Palmatier
SGM Mitchell D. Spray

Army Air Operations Group
USAG Fort McNair, D.C.
COL William McGarrity
CSM Shawn Jones

U.S. ARMY CYBER COMMAND/SECOND U.S. ARMY

Headquarters
Fort Belvoir, Va.
LTG Rhett A. Hernandez
CSM Robert P. Blackwood

U.S. ARMY NETWORK ENTERPRISE TECHNOLOGY COMMAND

Headquarters
Fort Huachuca, Ariz.
MG Alan Lynn
CSM Gerald Williams

Deputy Commander
Fort Huachuca, Ariz.
COL Peter Gallagher

Deputy to the Commander/Senior Technical Director/Chief Engineer
Fort Huachuca, Ariz.
Daniel Bradford, SES

National Capital Region (NCR)
Arlington, Va.
Richard Davis, SES

5th Signal Command (Theater)
Mannheim, Germany
COL Brian Crawford
CSM Gerald Tyce

2nd Signal Brigade
Mannheim, Germany
COL Jimmy Hall
CSM Milton Weatherly

7th Signal Brigade
Mannheim, Germany
COL Geoffrey Mangelsdorf
CSM Stephfon Watson

7th Signal Command (Theater)
Fort Gordon, Ga.
BG John B. Morrison
CSM Patrick Brooks

21st Signal Brigade
Fort Detrick, Md.
COL Mark Baxter
CSM Robert Daniel

93rd Signal Brigade
JB Langley-Eustis, Va.
COL Maria Biank
CSM Ricky Wallace

106th Signal Brigade
JB San Antonio, Texas
COL Jay Chapman
CSM Kevin Schehl

311th Signal Command (Theater)
Fort Shafter, Hawaii
MG James Walton
CSM Kevin Thompson

516th Signal Brigade
Fort Shafter, Hawaii
COL Scott Baer
CSM Travis L. Cherry

335th Signal Command (Theater)
East Point, Ga.
Lawrence Brock
CSM Damon Owens

335th Signal Command (OCP)
East Point, Ga.
MG Steven Smith
CSM Royd Patterson

160th Signal Brigade
Camp Arifjan, Kuwait
COL Linda Jantzen
CSM Arthur T. Swingler

1st Signal Brigade
Seoul, South Korea
COL Paul Fredenburgh
CSM Darrius Curry

ARMY TEST AND EVALUATION COMMAND

Headquarters
Aberdeen Proving Ground, Md.
MG Genaro J. Dellarocco
CSM Allen G. Fritzsching

Army Evaluation Center
Aberdeen Proving Ground, Md.
David Jimenez (Interim)
CSM Carlton Handy

Operational Test Command
Fort Hood, Texas
COL Joseph M. Martin
CSM Antoine B. Overstreet

U.S. MILITARY ACADEMY

Superintendent
West Point, N.Y.
LTG David H. Huntoon Jr.
CSM Todd Burnett

Dean of the Academic Board
West Point, N.Y.
BG Tim Trainor

Commandant of Cadets
West Point, N.Y.
BG Theodore D. Martin
CSM Todd Burnett

Director of Admissions
West Point, N.Y.
COL Deborah McDonald

Garrison Commander
West Point, N.Y.
COL Dane D. Rideout
CSM Kevin Fauntleroy

ARMY RESERVE COMMANDS AND UNITS

Office of the Chief, Army Reserve
Washington, D.C.
LTG Jeffrey W. Talley
CW5 Phyllis J. Wilson
CSM Michael D. Schultz

U.S. Army Reserve Command
Fort Bragg, N.C.
LTG Jeffrey W. Talley
CW5 Phyllis J. Wilson
CSM Michael D. Schultz

U.S. Army Reserve Medical Command
Pinellas Park, Fla.
BG Mary Link
CW5 (Vacant)
CSM Roger B. Schulz

U.S. Army Reserve Medical Readiness and Training Command
USAG Fort Sam Houston, Texas
BG Bryan R. Kelly
CSM Shelton Grimes

Military Intelligence Readiness Command
Fort Belvoir, Va.
BG William F. Duffy
CW5 Frank M. Patton
SGM Robert Swift (Acting)

21st Theater Sustainment Command
Kaiserslautern, Germany
BG Mark S. Hendrix
CSM Michael E. Biere

1st Mission Support Command
Fort Buchanan, P.R.
BG Fernando Fernandez
CSM Rene R. Rivera Casanova

9th Mission Support Command
Fort Shafter, Hawaii
BG Michele Compton
CW5 Michael A. Hanten
CSM Forrest L. Wacker

63rd Regional Support Command
Mountain View, Calif.
MG Michael J. Schweiger
CW5 Keith B. Schuster
CSM Royd R. Patterson

81st Regional Support Command
Fort Jackson, S.C.
BG Wiilliam Gothard
CSM James P. Wills

88th Regional Support Command
Fort McCoy, Wis.
BG Alton G. Berry
CW4 Patrick N. Nelligan
CSM Michael Koszuta

99th Regional Support Command
JB McGuire-Dix-Lakehurst, N.J.
MG William D.R. Waff
CSM Richard Castelveter

U.S. Army Reserve Support Command, First Army
Rock Island, Ill.
MG Mark J. MacCarley

87th U.S. Army Reserve Support Command (E)
Birmingham, Ala.
COL (P) Jody J. Daniels
CSM Rossie L. Peters

85th U.S. Army Reserve Support Command (W)
Arlington Heights, Ill.
BG Gracus K. Dunn
CSM Paul B. Bianco

80th Training Command (TASS)
Richmond, Va.
MG William H. Gerety
CW5 Charles Durham
CSM Luis Blanco

Army Materiel Command Southwest Asia (G4)
Kuwait
BG Karen LeDoux
CSM Stallard Robinett

100th Division (OS)
Fort Knox, Ky.
BG Mark C. Arnold
CSM James D. Isaacs

451st Sustainment Command (Expeditionary)
Wichita, Kan.
BG Paul M. Benenati
CSM Timothy Bolton

84th Training Command
Fort Knox, Ky.
MG David W. Puster
CSM Daniel Zebrauskas

78th Training Division (Operations)
JB McGuire-Dix-Lakehurst, N.J.
MG Bryan W. Wampler
CSM Franklin S. Epps

86th Training Division (Operations)
Fort McCoy, Wis.
BG Daniel L. York
CSM Harold P. Estabrooks

91st Training Division (Operations)
Fort Hunter-Liggett, Calif.
BG Jon. D. Lee
SGM Rupertson Espinosa (Acting)

108th Training Command (IET)
Charlotte, N.C.
MG Robert P. Stall
CSM William J. Payne

95th Division (IT)
Fort Sill, Okla.
BG Arlen Ray Royalty
CSM Don C. Smith Jr.

98th Division (IET)
Fort Benning, Ga.
BG Dwayne R. Edwards
CSM Grady Blue Jr.

104th Division (Leader Training)
JB Lewis-McChord, Wash.
BG Kurt A. Hardin
CSM Juan M. Loera Jr.

11th Aviation Command (Theater)
Fort Knox, Ky.
BG Peter T. Quinn
CSM Neil Heupel

311th Signal Command (Theater)
Fort Shafter, Hawaii
BG Janice M. Haigler
CSM Kevin J. Thompson

335th Signal Command (Theater)
East Point, Ga.
MG Stuart M. Dyer
CSM James A. Preston

359th Signal Brigade (Theater)
Fort Gordon, Ga.
BG Christopher R. Kemp
CSM Thomas Wilkerson

505th Signal Brigade
Las Vegas, Nev.
BG Kaffia Jones
CSM Michael Crespo

415th Chemical Brigade
Greenville, S.C.
BG A.C. Roper
CSM Damon R. Owens Sr.

377th Theater Sustainment Command
Belle Chasse, La.
MG Peter S. Lennon
CW5 Billy Ray Robinson
CSM James Lambert

103rd Sustainment Command (Expeditionary)
Des Moines, Iowa
BG Arlan M. Deblieck
CW4 Terry L. Taylor
CSM LeRoy Haugland

143rd Sustainment Command (Expeditionary)
Orlando, Fla.
BG Mark W. Palzer
CW5 David N. Conrad
CSM James W. Weaver

310th Sustainment Command
Indianapolis, Ind.
BG Don S. Cornett
CW5 Kenneth E. Foster
CSM Debbie L. Schroder

316th Sustainment Command (Expeditionary)
Coraopolis, Pa.
BG Bud R. Jameson Jr.
CW5 Raymond Wolf
CSM Michael J. Bolduc

U.S. Army Reserve Deployment Support Command
Birmingham, Ala.
COL Michael A. Mann
CSM Maryeva Beesley

U.S. Army Reserve Sustainment Command
Birmingham, Ala.
BG Steven J. Feldmann
CSM Edwin B. Whittington

79th Sustainment Support Command
Los Alamitos, Calif.
MG William D. Frink Jr.
CW5 Scott M. Jackson
CSM Robert N. Roberson Jr.

4th Sustainment Command (Expeditionary)
San Antonio, Texas
COL Norman B. Green
CSM Travis W. Williams

311th Sustainment Command
Los Angeles, Calif.
BG Therese O'Brien
CSM Jeremy Lasardo Ayala

364th Sustainment Command (Expeditionary)
Seattle, Wash.
BG Jonathan G. Ives
CW4 Richard L. Adams
CSM Thomas W. Jennings

412th Theater Engineer Command
Vicksburg, Miss.
BG Douglas R. Satterfield
CSM Guy Taylor Jr.

302nd Maneuver Enhancement Brigade
Chicopee, Mass.
BG James T. Williams
CSM Guy Taylor Jr.

411th Engineer Brigade
New Windsor, N.Y.
BG David L. Weeks

926th Engineer Brigade
Montgomery, Ala.
BG Lewis G. Irwin

416th Theater Engineer Command
Darien, Ill.
BG Charles P. Martin
CW5 Juan Luna
CSM Larry E. Reever

301st Maneuver Enhancement Brigade
JB Lewis-McChord, Wash.
BG Michael D. Devine
CSM Nathan Smith

372nd Engineer Group
Fort Snelling, Minn.
(Vacant)
CSM Robert Stanek

420th Engineer Brigade
Bryan, Texas
BG Tracy A. Thompson
CSM Richard D. Dunn

200th Military Police Command
Fort Meade, Md.
MG Stanford E. Holman
CW5 Robet E. Mayo
CSM Kurt J. Timmer

11th Military Police Brigade (IR)
Los Alamitos, Calif.
BG Scottie D. Carpenter
CSM Thomas H. LeGare

290th Military Police Brigade
Nashville, Tenn.
BG Samuel T. Nichols
CSM Dennis J Thomas

300th Military Police Brigade
Inkster, Mich.
(Vacant)
CSM Ted L. Copeland

800th Military Police Brigade
Farmingdale, N.Y.
MG Michael R. Smith
CSM Andrew J. Lombardo

3rd Medical Command (Deployment Support)
Forest Park, Ga.
MG Dean G. Sienko
CSM James J. Murrin Jr.

804th Medical Command
Fort Devens, Mass.
(Vacant)
CSM Stephen Maldonado

807th Medical Command (MDSC)
Fort Douglas, Utah
BG Daniel J. Dire
CSM David G. Davis

2nd Medical Brigade
San Pablo, Calif.
(Vacant)
CSM Robert J. Ramirez

139th Medical Brigade
Independence, MO.
(Vacant)
CSM Robert L. Herbert

176th Medical Brigade
Seagoville, Texas
(Vacant)
CSM Peter T. Trotter

307th Medical Brigade
Blacklick, Ohio
(Vacant)
CSM Denis P. Jenson

330th Medical Brigade
Fort Sheridan, Ill.
BG Jonathan Woodson
CSM Arlindo F. Almeida

75th Mission Command Training Division
Houston, Texas
MG Jimmie J. Wells
CW4 Alfred C. Dixon
CSM Luther Thomas Jr.

1st Brigade, 75th Division
Houston, Texas
COL William P. Barriage

2nd Brigade, 75th Division
JB McGuire-Dix-Lakehurst, N.J.
BG John H. Turner
CSM Darrin Wiser

3rd Brigade, 75th Division
Fort Sheridan, Ill.
BG Douglas Anderson
CSM Gregory Dorsey

4th Brigade, 75th Division
Birmingham, Ala.
BG Joe E. Chestnut Jr.
CSM Luther Thomas

5th Brigade, 75th Division
Camp Parks, Calif.
BG Megan P. Tatu
CSM Darby Reid

U.S. Army Civil Affairs and Psychological Operations Command (Airborne)
Fort Bragg, N.C.
MG Jeffrey A. Jacobs
CSM Dale R. Blosser

350th Civil Affairs Command
Pensacola, Fla.
BG Mark T. McQueen
CSM Mike Taylor

351st Civil Affairs Command
Mountain View, Calif.
BG Stephen K. Curda
CSM Anthony Morrow

352nd Civil Affairs Command
Fort Meade, Md.
BG Edward Burley
CSM Harry Bennett

353rd Civil Affairs Command
Staten Island, N.Y.
BG Daniel R. Ammerman
CSM Robert Haglund

2nd Psychological Operations Group
Twinsburg, Ohio
(Vacant)
CSM Donald Langworthy

7th Psychological Operations Group
Mountain View, Calif.
(Vacant)
CSM Phillip Houseworth

U.S. Army Reserve Joint and Special Troops Support Command
Fort Douglas, Utah
MG Mari K. Eder
CSM Timothy J. Smith

U.S. Army Reserve Legal Command
Gaithersburg, Md.
BG Patrick J. Reinert
CW5 Donald Yee
CSM Claudia Turner

U.S. Army Reserve Careers Division
Morrow, Ga.
(Vacant)
CSM Connie F. Commenia

Joint POW/MIA Accounting Command
JB Pearl Harbor-Hickam, Hawaii
MG Stephen D. Tom
CSM Hector Davila

STATE ADJUTANTS GENERAL

Alabama
MG Perry G. Smith
CW5 Max A. Dean
CSM Eddie W. Pike

Alaska
MG Thomas H. Katkus
CW5 James H. Keyes
CSM Gordon Choate

Arizona
MG Hugo E. Salazar
CW5 John C. Vitt
CSM Max I. Butler

Arkansas
MG William D. Wofford
CW5 Timothy L. Head
CSM Deborah Collins

California
MG David S. Baldwin
CW5 Artavia Edwards
CSM William Clark

Colorado
Maj. Gen. H. Michael Edwards*
CW5 Matt G. Dorram
CSM Michael Lawrence

Connecticut
Maj. Gen. Thaddeus J. Martin*
CW5 Mark S. Marini
CSM Joseph Sevigny

Delaware
MG Francis D. Vavala
CW5 John M. Turner
CSM Rosemarie H. Williams

District of Columbia
MG Errol R. Schwartz
CW5 Ronald E. Wormsley
CMSgt. Reginald Edwards*

Florida
Maj. Gen. Emmett R. Titshaw Jr.*
CW5 David P. Smith
CSM Robert Hosford

Georgia
Maj. Gen. James B. Butterworth*
CW4 Tom Golden
CSM James Nelson

Guam
MG Benny M. Paulino
CW5 Francis A. Pablo
CSM Daniel Elliott

Hawaii
Maj. Gen. Darryll D.Wong*
CW4 Owen M. Takenaka
CMSgt. Ronald Oshiba

Idaho
Maj. Gen. Gary L. Sayler*
CW5 Rudy Wise
CSM Kenneth Downing

Illinois
MG Dennis Celletti (Interim)
CW4 David W. Hammon
CSM Howard O. Robinson

Indiana
MG R. Martin Umbarger
CW5 Frank T. Vaughn
CSM James Brown

Iowa
MG Timothy E. Orr
CW5 Marvin W. Peters
CSM John Breitsprecker

Kansas
MG Lee Tafanelli
CW5 Hector Vasquez
CSM Scott W. Haworth

Kentucky
Maj. Gen. Edward W. Tonini*
CW5 James W. Simms
CSM Gregory Armstrong

Louisiana
MG Glenn H. Curtis
CW5 Kim E. Janneck
CSM Tommy Caillier

Maine
BG Brent Boyles
CW5 Darrell A. Stevens
CSM Terrence Harris

Maryland
MG James A. Adkins
CW5 Walter E. Rose Jr.
CSM Brian Sann

Massachusetts
MG L. Scott Rice (Acting)
CW5 Joseph A. Quinn
CSM David Costa

Michigan
MG Gregory Vadnais
CW5 Rhea R. Pruett
CSM Delbert Husband

Minnesota
MG Richard C. Nash
CW4 Peter T. Panos
CSM Cynthia Kallberg

Mississippi
MG Augustus Collins
CW5 Gene Touchstone
CSM George M. Miller

Missouri
MG Stephen L. Danner
CW5 Don W. Muschler
CSM James Schulte

Montana
BG Matthew Quinn
CW5 John J. Purpuro
CSM William Cooper

Nebraska
MG Judd H. Lyons
CW5 John R. Regan
CSM Eli Valenzuela

Nevada
Brig. Gen. William R. Burks*
CW5 David R. Anderson
CSM Steven Sitton

New Hampshire
Maj. Gen. William N. Reddel III*
CW5 William (Gene) Harville
CSM John V. Nanof

New Jersey
Brig. Gen. Michael L. Cunniff*
CW5 Guy C. Remig
CSM Jerome Jenkins

New Mexico
Brig. Gen. Jay Bledsoe*
CW5 Vincent O. Fernandez
CSM Kenneth R. Adair

New York
MG Patrick A. Murphy
CW5 Robert S. Wold
CSM Frank Wicks

North Carolina
MG Gregory A. Lusk
CW5 Richard D. Comer
CSM John Swart

North Dakota
MG David Sprynczynatyk
CW5 David J. Jundt
CSM Harley Schwind

Ohio
MG Deborah Ashenhurst
CW4 Jay K. Stuckman
CSM Timothy Grys

Oklahoma
MG Myles L. Deering
CW5 Christopher A. Rau
CSM Steven L. Jensen

Oregon
MG Raymond F. Rees
CW5 Terry S. Swartwout
CSM Brunk W. Conley

Pennsylvania
MG Wesley Craig
CW5 Angela E. Breit
CSM Michael Gundrum

Puerto Rico
MG Antonio J. Vicens-Gonzalez
CW5 Jose R. Garcia
CSM Ramoncito Burrgos

Rhode Island
MG Kevin R. McBride
CW5 Carole Angolano
CSM John McDonough

South Carolina
MG Robert E. Livingston Jr.
CW5 Harold (Eric) Seymore
CSM Robert H. Brickley

South Dakota
MG Timothy A. Reisch
CW5 Darla J. Crown
CSM Larry Zimmerman

Tennessee
MG Terry M. (Max) Haston
CW5 Robert V. Davis
CSM George Holland

Texas
Maj. Gen. John F. Nichols*
CW5 Earnest E. Metcalf
CSM Bradley Brandt

Utah
MG Brian L. Tarbet
CW5 Heber L. Hyde
CSM Bruce Summers

Vermont
Brig. Gen. Thomas E. Drew* (Interim)
CW5 Kent R. Samson
CSM Forest Glodgett

Virgin Islands
MG Renaldo Rivera
CS3 Augustin Webster
CSM Mona L. Barnes

Virginia
MG Daniel E. Long
CW5 Eddie H. Whitt
CSM Carl Holcomb

Washington
Maj. Gen. Timothy J. Lowenberg*
CW5 Teresa H. Burgess
CSM Robert J. Sweeney

West Virginia
MG James Hoyer
CW5 James P. Hudson
CSM Lawrence Vance

Wisconsin
Maj. Gen. Donald P. Dunbar*
CW5 Craig T. Krenz
CSM George E. Stopper

Wyoming
MG Luke Reiner
CW5 Mark Pfenning
CSM Thomas Allan

* Indicates incumbent is a member of the Air National Guard.

ARMY NATIONAL GUARD

Director, Army National Guard
Washington, D.C.
LTG William Ingram
CW5 (Vacant)
CSM Richard J. Burch

28th Infantry Division
Hershey, Pa.
MG Randall R. Marchi
CSM Brian Todero

2nd Infantry Brigade Combat Team (IBCT), 28th Infantry Division
Washington, Pa.
COL Michael R. Evans
CSM Paul J. Walker

53rd IBCT
Pinellas Park, Fla.
COL Thad Hill
CSM Stephen Corrow

55th Heavy Brigade Combat Team (HBCT)
Scranton, Pa.
COL George Schwartz
CSM Wade Heilman

56th Brigade Combat Team, 28th Infantry Division
Horsham, Pa.
COL Samuel Hayes
(Vacant)

28th Combat Aviation Brigade
Annville, Pa.
COL David E. Wood
CSM Christopher S. Kepner

29th Infantry Division (Light)
Fort Belvoir, Va.
MG Frank Batts
CSM Dennis Andrew Green

30th HBCT
Clinton, N.C.
LTC Lawrence Powell
CSM Ralph Johnson

116th HBCT, 29th Infantry Division
Staunton, Va.
COL Blake Ortner
CSM Thomas Yancey

Combat Aviation Brigade, 29th Infantry Division
Aberdeen Proving Ground, Md.
COL David Wayne Carey
CSM Thomas Blain Beyard

34th Infantry Division
Rosemount, Minn.
BG David Elicerio
CSM Douglas Julin

1st HBCT, 34th Infantry Division
Bloomington, Minn.
COL Eric Kerska
CSM Paul Herr

2nd IBCT, 34th Infantry Division
Boone, Iowa
COL Benjamin J. Corell
CSM Joel M. Arnold

32nd IBCT
Camp Douglas, Wis.
COL Martin Seifer
CSM Rafael Conde

116th Cavalry Brigade Combat Team
Boise, Idaho
COL Leo Don Blunck
CSM William K. Coggins

Combat Aviation Brigade, 34th Infantry Division
St. Paul, Minn.
COL Michael Huddleston
CSM Jeffery Lindberg

35th Infantry Division
Fort Leavenworth, Kan.
MG John Davoren
CSM Timothy Newton

33rd IBCT
Urbana, Ill.
COL Paul Hastings
CSM Timothy Beck

45th IBCT
Edmond, Okla.
COL Joel Ward
CSM Robert Maxwell

48th IBCT
Macon, Ga.
COL John F. King
CSM Joey Recker

Combat Aviation Brigade, 35th Infantry Division
Sedalia, Mo.
COL Mark Mclemore
CSM Robert Hilton Maze Jr.

Engineer Brigade, 35th Infantry Division
Fort Leonard Wood, Mo.
MG Randy Allen Alewel
CSM Will Edward Pierce Jr.

36th Infantry Division
Austin, Texas
MG James Brown
CSM Wilson Luther Early

39th IBCT
Little Rock, Ark.
COL Kirk E. Vanpelt
CSM James Megoloff

56th IBCT, 36th Infantry Division
Fort Worth, Texas
COL Jeffrey M. Breor
CSM Robert Maggard

72nd IBCT, 36th Infantry Division
Dallas, Texas
COL Mark Neal Campsey
CSM Alfred Cordova

155th HBCT
Tupelo, Miss.
COL John Rhodes
CSM Ronald Coleman

256th IBCT
Pineville, La.
COL Jaques Thibodeaux
CSM Clifford Ockman

Combat Aviation Brigade, 36th Infantry Division
Austin, Texas
COL Richard P. Adams
CSM (Vacant)

136th Maneuver Enhancement Brigade (MEB)
Round Rock, Texas
BG William Hall
CSM Richard Sublett

176th Engineer Brigade (MEB)
Austin, Texas
BG Lester Simpson
CSM Alfred Cordova

38th Infantry Division
Indianapolis, Ind.
MG Joseph L. Culver
CSM John A. Watson

37th IBCT, 38th Infantry Division
Akron-Canton, Ohio
COL James Perry
CSM Rodger Jones

76th IBCT
Indianapolis, Ind.
COL Gerald Hadley
CSM Charles Cox

278th Armored Cavalry Regiment
Knoxville, Tenn.
COL Franklin McCauley
CSM Mark Roach

Combat Aviation Brigade, 38th Infantry Division
Shelbyville, Ind.
COL Donald F. Strube
CSM David W. Jordan

40th Infantry Division
Los Alamitos, Calif.
MG Scott Johnson
CSM Andres Roman

29th IBCT
Honolulu, Hawaii
COL Kenneth Hara
CSM Leonard Ventura

41st IBCT
Tigard, Ore.
COL William Edwards
CSM Shane Lake

79th IBCT
San Diego, Calif.
COL Mark Malanka
CSM Joe Derma

81st HBCT
Seattle, Wash.
COL Christopher J. Fowler
CSM Raymond E. Jay

Combat Aviation Brigade, 40th Infantry Division
Fresno, Calif.
COL Laura Yeager
CSM Bryon Robinson

42nd Infantry Division
Troy, N.Y.
MG Steven Wickstrom
CSM Robert Jenks Jr.

27th IBCT
Syracuse, N.Y.
COL Geoffrey Slack
CSM Daniel Ames

50th IBCT, 42nd Infantry Division
Lawrenceville, N.J.
COL Mark Piterski
CSM Michael Rigby

86th IBCT, 42nd Infantry Division
Jericho, Vt.
COL Mark Lovejoy
CSM Toby Quick

Combat Aviation Brigade, 42nd Infantry Division
Latham, N.Y.
COL Mark Stryker
SGM John Houck

26th MEB
Reading, Mass.
BG John A. Hammond
CSM William Davidson

92nd MEB
Juana Diaz, P.R.
COL Francisco Neuman
CSM Gilbert Arocho

110th MEB
Kansas City, Mo.
COL William A. Ward
CSM Mike Lederle

111th MEB
Rio Rancho, N.M.
COL Thomas Bump
CSM Mark Baca

130th MEB
Charlotte, N.C.
COL Eric Kohl
CSM Malcolm Calhoun

141st MEB
Bismark, N.D.
COL Lannie Runck
CSM Bradley Heim

149th MEB
Louisville, Ky.
COL Scott A. Campbell
CSM Thomas L. Johnson

157th MEB
Milwaukee, Wisc.
COL Jeffrey J. Liethen
CSM Bradley J. Shield

158th MEB
Phoenix, Ariz.
COL John Burk
CSM Pamela Higgins

196th MEB
Sioux Falls, S.D.
COL Kevin Griese
CSM George Arends

204th MEB
Camp W.G. Williams, Utah
COL Robert Dunton
CSM Richard Thalman

218th MEB
Charleston, S.C.
COL Wayman Storey
CSM Douglas Gilliam

226th MEB
Mobile, Ala.
COL Sylvester Cannon
CSM Kevin J. Griffin

404th MEB
Chicago, Ill.
LTC Harvey B. Lloyd
CSM Jerry Clements

648th MEB
Columbus, Ga.
COL Andy Hall
CSM John Smiley

65th Fires Brigade
Tiverton, Utah
COL Loren S. Fuller
CSM Gregg Ludlow

45th Fires Brigade
Mustang, Okla.
COL Sonny Hurtado
CSM Tong Riggs

115th Fires Brigade
Cheyenne, Wyo.
COL Brian Nesvik
CSM Troy Guimond

138th Fires Brigade
Lexington, Ky.
COL Brian Wertzler
CSM Thomas Eugene Chumley

142nd Fires Brigade
Fayetteville, Ark.
COL Troy Dean Galloway
CSM Steve Eugene Halsted

169th Fires Brigade
Aurora, Colo.
COL Mark Brackney
CSM Douglas Allen Imfeld

197th Fires Brigade
Manchester, N.H.
COL Thomas Spencer
CSM Thomas F. Considine III

38th Troop Command
JB Elmendorf-Richardson, Alaska
COL Hunt Kerrigan
CSM Pamela Harrington

65th Troop Command
Springfield, Ill.
COL Mark Jackson
CSM Allan Freeland

74th Troop Command
Washington, D.C.
COL Aaron Dean
CSM Pamela Neal

91st Troop Command
Bowling Green, Va.
COL Walter Mercer
CSM Henry A. Motley

122nd Troop Support Command
Selma, Ala.
COL Jerry Martin
CSM Rickie K. Surovich

263rd Army Air and Missile Defense Command
Anderson, S.C.
MG Herbert Newton
CSM Van Mullinax

164th Air Defense Artillery Brigade
Orlando, Fla.
BG Frank S. Laudano
CSM John S. Hafford

174th Air Defense Artillery Brigade
Columbus, Ohio
BG Rufus Smith
CSM Michael Grove

66th Aviation Brigade
JB Lewis-McChord, Wash.
COL Steve Kent
CSM Kim S. May

63rd Aviation Group
Frankfort, Ky.
COL Michael Ferguson
CSM Kelvin Lee Wilkins

77th Aviation Brigade
Camp J.T. Robinson, N. Little Rock, Ark.
COL John O. Payne
CSM Lawrence Clayton Johnson Jr.

185th Aviation Group (Lift)
Jackson, Miss.
COL Dane Powell
CSM James Forrest

97th Aviation Troop Command
West Jordan, Utah
COL Lamar Blair
CSM Michael Cady

98th Aviation Troop Command
Phoenix, Ariz.
COL R.D. Aut
CSM Joe M. Dominguez

449th Aviation Group (Lift)
Kinston, N.C.
COL Todd Hunt
CSM Gary Hamm

1107th Theater Aviation Sustainment Group
Springfield, Mo.
COL William Thomas
CSM Randall Perkins

1108th Theater Aviation Sustainment Group
Gulfport, Miss.
COL George Berry
CSM Jarriet S. White

31st Chemical Brigade
Northport, Ala.
BG David R. Brown
CSM Mitchell Cooper

16th Engineer Brigade
Columbus, Ohio
BG Robert Clouse Jr.
CSM Steven Shepherd

35th Engineer Brigade
Cape Girardeau, Mo.
COL Randy A. Alewel
CSM Will Edward Pierce Jr.

111th Engineer Brigade
Red House, W.V.
LTC Paul Stephens
CSM Terry Moran

168th Engineer Brigade
Vicksburg, Miss.
BG Johnny M. Sellers
CSM Gary Iverson

194th Engineer Brigade
Jackson, Tenn.
BG Jeffrey Holmes
CSM Tracey McDow

225th Engineer Brigade
Pineville, La.
BG Owen Monconduit
CSM Robert Stiefvater

43rd Military Police Brigade
Warwick, R.I.
BG Charles Petrarca
CSM Robert Sturdhal

46th Military Police Command
Lansing, Mich.
BG Mandi Murray
CSM Daniel Lincoln

49th Military Police Brigade
Fairfield, Calif.
COL William Arruda
CSM Joseph Menard

177th Military Police Brigade
Taylor, Mich.
COL Michael White
CSM Dale Clarmont

228th Signal Brigade
Spartanburg, S.C.
BG Gregory Warren Batts
CSM Charles Richard Campbell

261st Signal Brigade
Dover, Del.
COL James Begley
CSM Robert Miller

167th Theater Support Command
Birmingham, Ala.
BG (P) Reynold N. Hoover
CSM Richard Weems

184th Transportation Command Element
Laurel, Miss.
BG Philip Fisher
CSM Jeffrey Lee Riggs

58th Battlefield Surveillance Brigade (BFSB)
Towson, Md.
COL Andrew Blair
CSM (Vacant)

67th BFSB
Lincoln, Neb.
COL Michael Deger
CSM Marty Baker

71st BFSB
San Antonio, Texas
COL Brian Ray
CSM (Vacant)

142nd BFSB
Decatur, Ala.
COL Joe G. Barnard
CSM Kevin J. Stallings

560th BFSB
Fort Gillem, Ga.
COL Thomas Carden
CSM Phillip Stringfield

297th BFSB
JB Elmendorf-Richardson, Alaska
COL Michael Thompson
CSM Daniel Goodwin

17th Sustainment Brigade
Las Vegas, Nev.
COL Zachary Doser
CSM Robert Brown

36th Sustainment Brigade
Temple, Texas
COL Sean Ryan
CSM Elizabeth Shockley

38th Sustainment Brigade
Kokomo, Ind.
COL Deedra E. Thombleson
CSM Karolyn L. Peeler

108th Sustainment Brigade
Chicago, Ill.
LTC Drew Duckett
CSM Joseph Ramirez

113th Sustainment Brigade
Greensboro, N.C.
COL David Jones
CSM Michael Scott

230th Sustainment Brigade
Chattanooga, Tenn.
COL William Mark Hart
CSM Stanley Massengale

287th Sustainment Brigade
Wichita, Kan.
COL Barry Taylor
CSM Patrick Cullen

369th Sustainment Brigade
New York, N.Y.
COL Reginald Sanders
CSM (Vacant)

371st Sustainment Brigade
Kettering, Ohio
COL Gregory Robinette
CSM Scott Barga

50th Area Support Group
Homestead, Fla.
COL Valeria Gonzalez-Kerr
SGM Enrique Mendez Jr.

42nd Regional Support Group (RSG)
Somerset, N.J.
COL Joseph Cowan
CSM Joseph Brennan

109th RSG
Rapid City, S.D.
COL William Freidel
CSM James Hoekman

115th RSG
Roseville, Calif.
COL Keith Tresh
CSM Randall Cady

120th RSG
Augusta, Maine
COL Jeffrey Morton
CSM Richard Hannibal

151st RSG
Framingham, Mass.
COL Enrique Araniz
CSM Normand Dubois

191st RSG
San Juan, P.R.
COL Javier Lazaro
CSM Jamie Perez

198th RSG
Phoenix, Ariz.
COL Leslie R. Montgomery
CSM Gabriel Almendarz

201st RSG
Fort Gordon, Ga.
COL Bill Williams
CSM Randall Parker

265th RSG
Metter, Ga.
COL Craig McGalliard
CSM Tony Willis

272nd RSG
Jackson, Mich.
COL Monique Bierwirth
CSM John Engel

329th RSG
Virginia Beach, Va.
COL Timothy P. Williams
CSM Cheyenne Johnson

347th RSG
Roseville, Minn.
COL Patrick Dwyer
CSM Eric Arne

635th RSG
Hutchinson, Kan.
COL John Campbell
CSM Edward Boring

734th RSG
Johnston, Iowa
COL Timothy Rickert
CSM Ricky G. Ernst

1889th RSG
Butte, Mont.
COL Patrick Nugent
CSM Lloyd Nelson

78th Homeland Response Force
Marietta, Ga.
COL Michael L. Scholes
CSM Grady A. Gayton

19th Special Forces Group (Airborne)
Draper, Utah
COL Steven Randall White
CW5 Osvaldo Soto
CSM Bruce Scott Bollinger

20th Special Forces Group (Airborne)
Birmingham, Ala.
COL Randall M. Zeegers
CSM David D. Wolff

111th Ordnance Group
Opelika, Ala.
COL Rita Casey
CSM (Vacant)

71st Theater Information Operations Group
Austin, Texas
COL Richard Noriega
CSM (Vacant)

300th Military Intelligence Brigade
Draper, Utah
COL Derek Tolman
CSM Lane Wayment

East ARNG Aviation Training Site
Annville, Pa.
COL Todd Levendoski
CSM Dale Miller

Western ARNG Aviation Training Site
Marana, Ariz.
COL Kenneth G. Campbell
CSM Dan Powers

CIVILIAN AIDES TO THE SECRETARY OF THE ARMY

Alabama
G. Mack Dove (South)
John B. Rogers (North)

Alaska
Sharon E. Anderson (South)
Charles H. Wallace (North) (Senior)

American Samoa
Mapu S. Jamias

Arizona
Randall H. Groth

Arkansas
Vacant

California
William G. Gang (South)
Joseph J. McCann Jr. (Central)
Joseph R. Sweeney (North)

Colorado
William J. Hybl (Emeritus)

Connecticut
Gilbert W. Sanborn

Delaware
Arthur V. Episcopo (Emeritus)

District of Columbia
Sherwood D. Goldberg (Senior)

Florida
Thomas B. Dyer (South)
Michael L. Ferguson (North)
Charles W. Maddox (Emeritus)
J. Wallace Schoettelkotte (Emeritus)

Georgia
James R. Balkcom Jr. (Senior)
Charles W. Doubleday III (Senior)
Felker W. Ward Jr. (Emeritus)

Guam
L. Carl Peterson

Hawaii
Allen K. Hoe (Oahu East and the Islands of Kahoolawe, Lani and Maui)
Christina Kemmer (Emeritus)
William J. Moore (Island of Hawaii)
William W. Paty Jr. (Emeritus)

Idaho
James A. Cozine

Illinois
John E. Scully Jr.

Indiana
Robert W. Spanogle

Iowa
Sam C. Kalainov (Emeritus)
J. Daniel McGowan II

Kansas
Robert Arter (East)
S. Mark Edwards (West)
John G. Montgomery (Emeritus)

Kentucky
Jerry Cecil (North)
Clarissa J. (TC) Freeman (Central)
Anna Caryl Guffey (Emeritus)
Charles A. Henderson (West)

Louisiana
William J. Hill III

Maine
Ralph E. Leonard (Emeritus)

Maryland
Turhan E. Robinson (Senior)

Massachusetts
Herbert S. Hoffman (Emeritus)
Roger A. Saunders (Emeritus)
Thomas A. Kershaw

Michigan
Bruce G. MacDonald

Minnesota
Veda F. Ponikvar (Emeritus)
Harry A. Sieben

Mississippi
J. Dwight Dyess

Missouri
Larry V. Sexton (Central)

Montana
Kenneth R. Inabnit

Nebraska
James L. Murphy

Nevada
Tyrus W. Cobb

New Hampshire
Griffin T. Dalianis

New Jersey
Robert J. Maguire

New Mexico
Oscar M. Love Jr. (Emeritus)

New York
Walter Kaye (Emeritus)
F. Anthony Keating (North) (Senior)
Laurence C. Windsor (South)

North Carolina
Thomas M. Bolton

North Dakota
Connie Sprynczynatyk

Northern Mariana Islands (CNMI)
Edward Manibusan (Senior)

Ohio
William A. LaPrise (South)
William H. Willoughby Jr. (Emeritus)

Oklahoma
Bill Burgess
Gilbert C. Gibson (Emeritus)

Oregon
Charles L. Deibert
James B. Thayer Sr. (Emeritus)

Pennsylvania
John E. Spisso (Emeritus)

Puerto Rico
Felix A. Santoni (Senior)

Rhode Island
Theodore F. Low

South Carolina
T. Patton Adams (Emeritus)
Donald G. McLeese

South Dakota
Ronald F. Williamson

Tennessee
Robert L. Echols
William M. Harpel (East)
Ben S. Kimbrough (Emeritus)
Jack B. Turner (West)

Texas
Dianne Delisi (Capital Region)
Michael A. Hood (North) (Senior)
Richard M. Kleberg III (South)
Randall M. Pais (East) (Senior)
Jean Shine (Central)
A.F. (Tom) Thomas (West)

Utah
John S. Edwards

Vermont
Roderic B. Vitty

Virgin Islands
Virdin C. Brown

Virginia
Karen Theobald Conlin (Central)
Joseph E. DeFrancisco (North)
T. Carter Melton Jr. (West)
David S. Weisman (South)

Washington
James M. Collins

West Virginia
Bruce E. Moss

Wisconsin
Paul E. Lima

Wyoming
Judith A. Legerski (Emeritus)

ARMY RESERVE AMBASSADORS

Alabama
James Darden

Alaska
(Vacant)

Arizona
John J. South
Joseph H. Tillotson (Emeritus)

Arkansas
Thomas G. Anderson Jr.
Darrell Dale

California
Ron Dunn
Daniel E. Furtado
Richard A. Lundin
Ronald H. Markarian (Emeritus)
Russell E. Park
Michael R. Teilmann

Colorado
Shawn F. Graves
James C. Sherman (Emeritus)

Connecticut
Carl R. Venditto
Ronald E. Weil

Delaware
Robert D. Bewick Jr. (Emeritus)
Nicholas L. Cerchio III

District of Columbia
Jonathan H. Kent
Wendall B. McClellan

Florida
Allie L. Braswell Jr.
Leon Caffie
Don Slesnick

Georgia
Alan D. Bell
Luis Carreras
William H. Johnson

Hawaii
P. Pasha Baker

Idaho
Joseph E. Eyre (Emeritus)
Kip Moggridge

Illinois
William Hawes
Jack H. Kotter
John Moulton

Indiana
Doug Gibbens
John A. Topper

Iowa
Gary C. Wattnem

Kansas
Donald L. Jacka
Antonio P. Monaco

Kentucky
Charles E. Gorton

Louisiana
Thomas G. Fierke

Maine
Edwin N. Clift (Emeritus)
Arthur R. Wickham

Maryland
Robert Beahm
John V. Meyers (Emeritus)
Howard T. Mooney Jr.
Chuck Trombetta Jr. (Emeritus)

Massachusetts
Francis J. Doherty (Emeritus)
Joseph P. Lopes (Emeritus)
Ted Sarandis

Michigan
Melvin A. Bauman
Paul DeSander
Joseph E. Thomas Jr. (Emeritus)

Minnesota
Thomas B. Haugo
James Lundell

Mississippi
Robert W. Chestnut
Stanley N. Reeves

Missouri
Danny Baldwin
Walter Hammerschmidt
William R. Layman

Montana
James Madison

Nebraska
John Bryan

Nevada
Ashley J. Hall

New Hampshire
James A. Normand

New Jersey
Alan Davis
Steven Hashem

New Mexico
Robert Cortez

New York
Myron J. Berman
Daniel MacLaughlin
Norbert J. Rappl (Emeritus)
Robert J. Winzinger Sr.

North Carolina
Jim Cardo
Johnny H. Dwiggins

North Dakota
Robert O. Black
Curtis A. Juhala (Emeritus)

Ohio
Stephen Ackman
Kenneth E. Ault (Emeritus)
John A. Lendrum

Oklahoma
James R. Sholar

Oregon
Daniel F. Hitchcock (Emeritus)
Curtis A. Loop

Pennsylvania
George H. Duell Jr.
Fred J. Fair
Philip A. Petter (Emeritus)
Daniel Rubini
Gabriel J. Zinni (Emeritus)

Puerto Rico
Luis Berrios-Amadeo
Horacio A. Cabrera

Rhode Island
Dennis E. Morgan

South Carolina
George W. Goldsmith
Robert R. Nash

South Dakota
Robert Perez

Tennessee
John L. Dyess
Sherman R. Reed

Texas
Olin F. Brewster
Alvin W. Jones
William C. McCulloch
Henry J. Ostermann

Utah
Richard Folkerson
Paul Swenson (Emeritus)

Vermont
John des Groseilliers

Virginia
Ronald L. Adolphi
Richard E. Collier (Emeritus)
Michael F. Kavanaugh (Emeritus)
Anthony T. Reed

Washington
William Fred Aronow
Stan Flemming
Mary A. Miller (Emeritus)

West Virginia
Amanda Del VillanClark
James C. Hunt (Emeritus)
David T. Mitchell Jr.

Wisconsin
Gerald W. Meyer
Max L. Oleson

Wyoming
Barry D. Gasdek

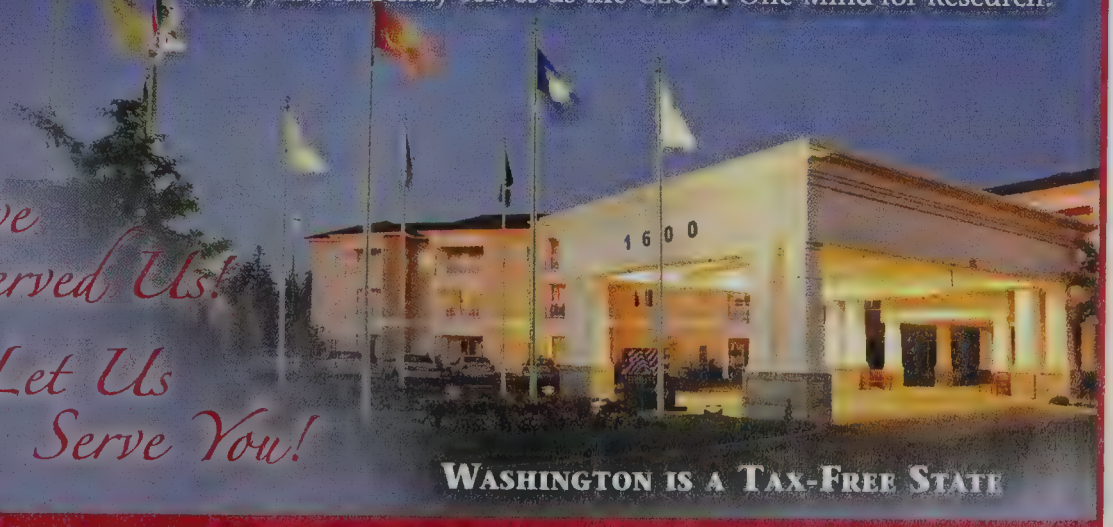
"We feel so fortunate that my mom made the decision to move to Patriots Landing when she did. She loves her apartment, the staff is the best, and she spends her days with people who share the same values, and have had many of the same life experiences as her – it was one of her very best decisions."

General Peter Chiarelli, USA (Ret)
32nd Vice Chief of Staff, U.S. Army
(August 2008 - January 2012)

General (Ret.) Peter Chiarelli former Vice Chief of Staff of the Army and currently serves as the CEO at One Mind for Research.

PATRIOTS Landing
RETIREMENT COMMUNITY

You've Served Us!
Now Let Us Serve You!



WASHINGTON IS A TAX-FREE STATE

1600 Marshall Circle ★ DuPont, WA 98327 ★ www.patriotslanding.com ★ 877.964.4900

Early Bird Exhibit Space Rates Now Available

The Association of the United States Army's Institute of Land Warfare

ARMY AVIATION SYMPOSIUM AND EXPOSITION

A PROFESSIONAL DEVELOPMENT FORUM

9-11 JANUARY 2013

NATIONAL HARBOR, MARYLAND

Will You Recognize U.S. Army Aviation in 2020?

Engage with the broadest expertise as the Army modernizes and transforms.

- PM and PEO perspectives on experience, needs and direction
- Learn about critical performance under dynamic field conditions
- Discuss equipment and technology as part of modernization

Visit www.ausa.org for more information.

AUSA, Industry Affairs: 800-336-4570, ext. 2665

MAPS

Key

- Active Army
- Army National Guard
- Army Reserve
- Unified Combatant Command/ Joint Headquarters

Joint Base Lewis-McChord, WA
I Corps
2nd BCT (Stryker), 2nd Inf. Div.
3rd BCT (Stryker), 2nd Inf. Div.
4th BCT (Stryker), 2nd Inf. Div.
1st SF Gp. (A)
2nd Bn., 75th Ranger Rgt.
16th Combat Avn. Bde.
17th Fires Bde.
42nd MP Bde.
62nd Med. Bde.
201st Battlefield Surveillance Bde.
555th Eng. Bde.
593rd Sustainment Bde.
6th MP Gp. (CID)

Peterson AFB, CO
100th Missile Def. Bde.

Peterson AFB, CO
U.S. Northern Cmd.
U.S. Space Cmd.

Colorado Springs, CO
1st Space Bde.

Fort Carson, CO
4th Inf. Div. (M)
1st, 2nd, 3rd, 4th BCTs,
4th Inf. Div. (M)
43rd Sustainment Bde.
71st Ord. Gp.
10th SF Gp. (A)

Offutt AFB, N
U.S. Strategic Cr

Fort Leavenworth
Combined Arms C

Fort Riley, KS
1st Inf. Div.
1st BCT, 1st Inf. Div.
2nd BCT, 1st Inf. Div.
4th BCT, 1st Inf. Div.
Combat Aviation Bde., 1st Inf. Div.
Sustainment Bde., 1st Inf. Div.

Fort Irwin, CA
National Training Ctr.
11th Armd. Cav. Rgt.
916th Spt. Bde.

Fort Sill, O
75th Fires Bde
212th Fires Bd
214th Fires Bd
31st ADA Bde

Fort Huachuca, AZ
Network Enterprise Tech.
Cmd./9th Sig. Cmd.
11th Tactical Theater Sig. Bde.

Fort Hood, TX
III Corps
1st Cav. Div.
1st BCT, 1st Cav. Div.
2nd BCT, 1st Cav. Div.
3rd BCT, 1st Cav. Div.
4th BCT, 1st Cav. Div.
1st Air Cav. Bde., 1st Cav. Div.
4th Combat Avn. Bde.
First Army Division-West
3rd Armd. Cav. Rgt.
13th Sustainment Cmd. (E)
4th Sustainment Bde.
1st Medical Bde.
21st Cav. Bde.
36th Eng. Bde.
41st Fires Bde.
48th Chem. Bde.
69th ADA Bde.
85th CA Bde.
89th MP Bde.
504th Battlefield Surveillance Bde.
13th Fin. Mgmt. Ctr.
Operational Test Cmd.

Schofield Barracks, Wheeler Army Airfield, HI
25th Inf. Div.
2nd, 3rd BCTs, 25th Inf. Div.
Combat Avn. Bde., 25th Inf. Div.
8th Theater Sustainment Cmd.
8th MP Bde.
45th Sustainment Bde.
130th Eng. Bde.
500th MI Bde.
599th Trans. Gp.

Fort Bliss, TX
1st Armd. Div.
Joint Task Force North
32nd AAMDC
11th ADA Bde.
1st, 2nd, 3rd, 4th BCTs,
1st Armd. Div.
Combat Aviation Bde.,
1st Armd. Div.
15th Sustainment Bde.

Fort Sam Houston-Joint Base San Anton
USA North/Fifth USA
USA South
USA Medical Cmd.
Installation Mgmt. Cmd.
106th Sig. Bde.
470th MI Bde.

Alaska

Fort Wainwright, AK
1st BCT (Stryker), 25th Inf. Div.

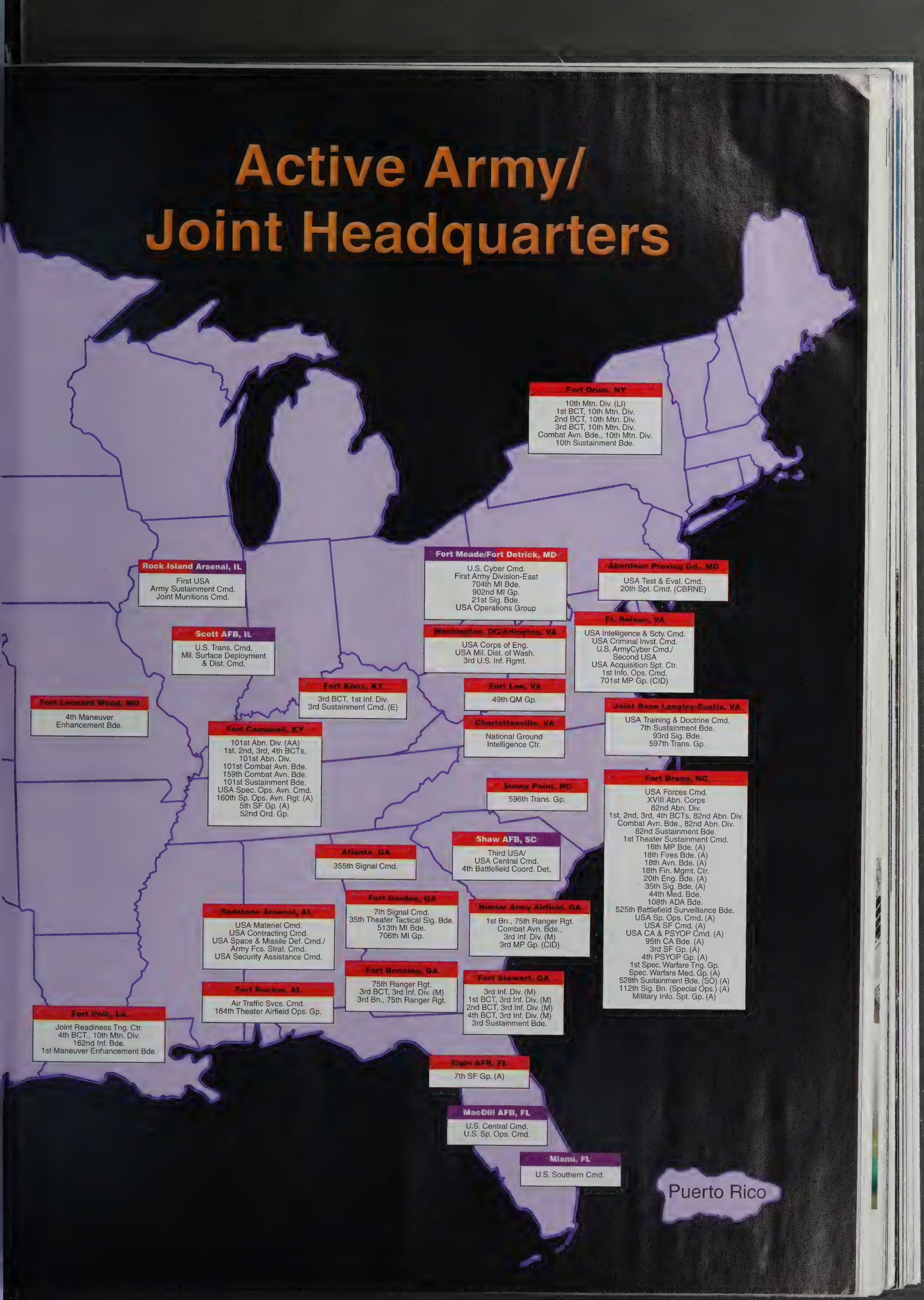
Joint Base Elmendorf-Richardson, AK
USA Alaska
1st BCT, 25th Inf. Div.
4th BCT (A), 25th Inf. Div.
2nd Eng. Bde.

Hawaii

Honolulu, HI
U.S. Pacific Cmd.

Fort Shafter, HI
USA Pacific
311th Sig. Cmd. (T)
516th Sig. Bde.
94th AAMDC
18th Med. Cmd.
413th Contracting Spt. Bde.
196th Inf. Bde. (Tng. Spt.)

Active Army/ Joint Headquarters



Fort Drum, NY
10th Mtn. Div. (LI)
1st BCT, 10th Mtn. Div.
2nd BCT, 10th Mtn. Div.
3rd BCT, 10th Mtn. Div.
Combat Avn. Bde., 10th Mtn. Div.
10th Sustainment Bde.

Rock Island Arsenal, IL
First USA
Army Sustainment Cmd.
Joint Munitions Cmd.

Fort Meade/Fort Detrick, MD
U.S. Cyber Cmd.
First Army Division-East
704th MI Bde.
902nd MI Gp.
21st Sig. Bde.
USA Operations Group

Aberdeen Proving Gd., MD
USA Test & Eval. Cmd.
20th Spt. Cmd. (CBRNE)

Scott AFB, IL
U.S. Trans. Cmd.
Mil. Surface Deployment & Dist. Cmd.

Washington, DC/Arlington, VA
USA Corps of Eng.
USA Mil. Dist. of Wash.
3rd U.S. Inf. Rgmt.

Ft. Belvoir, VA
USA Intelligence & Scty. Cmd.
USA Criminal Invst. Cmd.
U.S. ArmyCyber Cmd./ Second USA
USA Acquisition Spt. Ctr.
1st Info. Ops. Cmd.
701st MP Gp. (CID)

Fort Knox, KY
3rd BCT, 1st Inf. Div.
3rd Sustainment Cmd. (E)

Fort Lee, VA
49th QM Gp.

Fort Leonard Wood, MO
4th Maneuver Enhancement Bde.

Charlottesville, VA
National Ground Intelligence Ctr.

Joint Base Langley-Eustis, VA
USA Training & Doctrine Cmd.
7th Sustainment Bde.
93rd Sig. Bde.
597th Trans. Gp.

Fort Campbell, KY
101st Abn. Div. (AA)
1st, 2nd, 3rd, 4th BCTs, 101st Abn. Div.
101st Combat Avn. Bde.
159th Combat Avn. Bde.
101st Sustainment Bde.
USA Spec. Ops. Avn. Cmd.
160th Sp. Ops. Avn. Rgt. (A)
5th SF Gp. (A)
52nd Ord. Gp.

Sunny Point, NC
596th Trans. Gp.

Fort Bragg, NC
USA Forces Cmd.
XVIII Abn. Corps
82nd Abn. Div.
1st, 2nd, 3rd, 4th BCTs, 82nd Abn. Div.
Combat Avn. Bde., 82nd Abn. Div.
82nd Sustainment Bde.
1st Theater Sustainment Cmd.
16th MP Bde. (A)
18th Fires Bde. (A)
18th Avn. Bde. (A)
18th Fin. Mgmt. Ctr.
20th Eng. Bde. (A)
35th Sig. Bde. (A)
44th Med. Bde.
108th ADA Bde.
525th Battlefield Surveillance Bde.
USA Sp. Ops. Cmd. (A)
USA SF Cmd. (A)
USA CA & PSYOP Cmd. (A)
95th CA Bde. (A)
3rd SF Gp. (A)
4th PSYOP Gp. (A)
1st Spec. Warfare Tng. Gp.
Spec. Warfare Med. Gp. (A)
528th Sustainment Bde. (SO) (A)
112th Sig. Bn. (Special Ops.) (A)
Military Info. Spt. Gp. (A)

Shaw AFB, SC
Third USA/
USA Central Cmd.
4th Battlefield Coord. Det.

Atlanta, GA
355th Signal Cmd.

Fort Gordon, GA
7th Signal Cmd.
35th Theater Tactical Sig. Bde.
513th MI Bde.
706th MI Gp.

Hunter Army Airfield, GA
1st Bn., 75th Ranger Rgt.
Combat Avn. Bde.,
3rd Inf. Div. (M)
3rd MP Gp. (CID)

Redstone Arsenal, AL
USA Materiel Cmd.
USA Contracting Cmd.
USA Space & Missile Def. Cmd./ Army Fcs. Strat. Cmd.
USA Security Assistance Cmd.

Fort Benning, GA
75th Ranger Rgt.
3rd BCT, 3rd Inf. Div. (M)
3rd Bn., 75th Ranger Rgt.

Fort Stewart, GA
3rd Inf. Div. (M)
1st BCT, 3rd Inf. Div. (M)
2nd BCT, 3rd Inf. Div. (M)
4th BCT, 3rd Inf. Div. (M)
3rd Sustainment Bde.

Fort Rucker, AL
Air Traffic Svcs. Cmd.
164th Theater Airfield Ops. Gp.

Fort Polk, LA
Joint Readiness Tng. Ctr.
4th BCT., 10th Mtn. Div.
162nd Inf. Bde.
1st Maneuver Enhancement Bde.

Elgin AFB, FL
7th SF Gp. (A)

MacDill AFD, FL
U.S. Central Cmd.
U.S. Sp. Ops. Cmd.

Miami, FL
U.S. Southern Cmd.

Puerto Rico

Seattle, WA
81st HBCT
Joint Base Lewis-McChord, WA
66th Avn. Bde.
Tigard, OR
41st IBCT
Butte, MT
1889th Regional Spt. Gp.
Key
BFSB—Battlefield Surveillance Brigade
HBCT—Heavy Brigade Combat Team
IBCT—Infantry Brigade Combat Team
MEB—Maneuver Enhancement Brigade
SBCT—Stryker Brigade Combat Team
Bismarck, ND
141st MEB
Boise, ID
116th Cavalry BCT
Rapid City, SD
109th Regional Spt. Gp.
Sioux Falls, SI
196th MEB
Cheyenne, WY
115th Fires Bde.
Fairfield, CA
49th MP Bde.
Utah
Camp Williams:
204th MEB
Tiverton:
65th Fires Bde.
West Jordan:
97th Avn. Troop Cmd.
Draper:
300th MI Bde.;
19th SF Gp. (A)
Lincoln, NE
67th BFSB
Roseville, CA
115th Regional Spt. Gp.
Aurora, CO
169th Fires Bde.
Fort Leavenworth
35th Inf. Div.
Fresno, CA
Combat Avn. Bde.,
40th Inf. Div.
Las Vegas, NV
17th Sustainment Bde.
Hutchinson, K
635th Regional Spt
Wichita, KS
287th Sustainment
Los Alamitos, CA
40th Inf. Div.
Mustang, OK
45th Fires Bde
Phoenix, AZ
158th MEB
98th Avn. Troop Cmd.
198th Regional Spt. Gp.
San Diego, CA
79th IBCT
Rio Rancho, NM
111th MEB
Edmond, OK
45th IBCT
Texas
Fort Worth:
56th IBCT, 36th Inf. Div.
Dallas:
72nd IBCT, 36th Inf. Div.
Temple:
36th Sustainment Bde.
Round Rock:
136th MEB
San Antonio:
71st BFSB
Austin:
36th Inf. Div.;
Combat Avn. Bde.,
36th Inf. Div.;
176th Eng. Bde.;
71st Theater Info. Ops. Gp.
Alaska
Joint Base Elmendorf-Richardson, AK
38th Troop Cmd.
297th BFSB
Hawaii
Honolulu, HI
29th IBCT

Army National Guard

Minnesota
Rosemount:
34th Inf. Div.
Bloomington:
IBCT, 34th Inf. Div.
St. Paul:
mbat Avn. Bde.,
34th Inf. Div.
Roseville:
Regional Spt. Gp.

Milwaukee, WI
157th MEB

Camp Douglas, WI
32nd IBCT

Boone, IA
2nd IBCT, 34th Inf. Div.

Johnstown, IA
4th Regional Spt. Gp.

Michigan
Jackson:
272nd Regional Spt. Gp.
Lansing:
46th MP Cmd.
Taylor:
177th MP Bde.

Ohio
Akron-Canton:
37th IBCT, 38th Inf. Div.
Columbus:
16th Eng. Bde.;
174th ADA Bde.
Ketterling:
371st Sustainment Bde.

Illinois
Chicago:
108th Sustainment Bde.;
404th MEB
Urbana:
33rd Inf. Bde.
Springfield:
65th Troop Cmd.

Indiana
Indianapolis:
38th Inf. Div.; 76th IBCT
Kokomo:
38th Sustainment Bde.
Shelbyville:
Combat Avn. Bde.,
38th Inf. Div.

Red House, WV
111th Eng. Bde.

Missouri
Sedalia:
Combat Avn. Bde.,
35th Inf. Div.
Fort Leonard Wood:
Eng. Bde., 35th Inf. Div.
Kansas City:
110th MEB
Springfield:
1107th Theater Avn.
Sustainment Gp.
Cape Girardeau:
35th Eng. Bde.

Kentucky
Louisville:
149th MEB
Lexington:
138th Fires Bde.
Frankfort:
63rd Avn. Gp.

Tennessee
Knoxville:
278th Armd. Cav. Rgt.
Jackson:
194th Eng. Bde.
Chattanooga:
230th Sustainment Bde.

Arkansas
Little Rock:
39th IBCT
Fayetteville:
142nd Fires Bde.
Camp Robinson:
77th Avn. Bde.

Mississippi
Tupelo:
155th HBCT
Vicksburg:
168th Eng. Bde.
Laurel:
184th Trans. Cmd. Element
Gulfport:
1108th Theater Avn.
Sus. Gp.
Jackson:
185th Avn. Gp (Lift)

Alabama
Birmingham:
167th Theater Spt. Cmd.;
20th SF Gp. (A)
Decatur:
142nd BFSB
Selma:
122nd Troop Spt. Cmd.
Northport:
31st Chemical Bde.
Opelika:
111th Ord. Gp.
Mobile:
226th MEB

Georgia
Macon:
48th IBCT
Fort Gordon:
201st Regional Spt. Gp.
Fort Gillem:
560th BFSB
Metter:
256th Regional Spt. Gp.
Columbus:
648th MEB
Marietta:
78th Homeland
Response Fc.

Louisiana
Pineville:
256th IBCT
225th Eng. Bde.

Augusta, ME
120th Regional Spt. Gp.

Jericho, VT
86th IBCT, 42nd Inf. Div.

New York
Troy:
42nd Inf. Div.
Syracuse:
27th IBCT
Latham:
Combat Avn. Bde.,
42nd Inf. Div.
New York City:
369th Sustainment Bde.

Manchester, NH
197th Fires Bde.

Massachussetts
Belmont:
26th MEB
Framingham:
151st Regional Spt. Gp.

Rhode Island
Warwick:
43rd MP Bde.

Pennsylvania
Hershey: 28th Inf. Div.
Washington: 2nd IBCT, 28th Inf. Div.
Scranton: 55th HBCT, 28th Inf. Div.
Willow Grove: 56th BCT,
28th Inf. Div.
Annville: Combat Avn. Bde.,
28th Inf. Div.

New Jersey
Lawrenceville:
50th IBCT, 42nd Inf. Div.
Somerset:
42nd Regional Spt. Gp.

Maryland
Aberdeen Proving Gd.:
Combat Avn. Bde., 29th Inf. Div.
Pikesville:
58th BFSB

Dover, DE
261st Sig. Bde.

Virginia
Fort Belvoir:
29th Inf. Div. (L)
Bowling Green:
91st Troop Cmd.
Staunton:
116th HBCT, 29th Inf. Div.
Virginia Beach:
329th Regional Spt. Gp.

Washington, DC
74th Troop Cmd.

North Carolina
Clinton:
30th HBCT
Charlotte:
130th MEB
Greensboro:
113th Sustainment Bde.
Kinston:
449th Avn. Gp. (Lift)

South Carolina
Charleston:
218th MEB
Anderson:
263rd AAMDC
Spartanburg:
228th Sig. Bde.

Orlando, FL
164th ADA Bde.

Pinellas Park, FL
53rd IBCT

Homestead, FL
50th Area Spt. Gp.

Puerto Rico
Juana Diaz:
92nd MEB
San Juan:
191st Regional Spt. Gp.

Puerto Rico

Seattle, WA
364th Sustainment Cmd. (E)
Joint Base Lewis-McChord, WA
104th Div.
301st MEB
San Pablo, CA
2nd Med. Bde.
Camp Parks, CA
5th Bde., 75th Div.
Mountain View, CA
63rd Regional Spt. Cmd.
351st CA Cmd.
7th Psyop Gp.
Las Vegas, NV
505th Sig. Bde.
Fort Hunter-Liggett, CA
91st Tng. Div.
Los Angeles, CA
311th Sustainment Cmd.
Los Alamitos, CA
79th Sustainment Spt. Cmd.
11th MP Bde. (IR)
Fort Douglas, UT
807th Med. Cmd.
USAR Joint and
Special Troops Spt. Cmd.
Wichita, KS
451st Sustainment Cl
Oklahoma City
95th Div.
Seagoville,
176th Med. Bc
San Antonio/
Fort Sam Houston, TX
USAR Med. Readiness
and Tng. Cmd.
4th Sustainment Cmd. (E)
Alaska
Hawaii
Joint Base
Pearl Harbor-Hickam, HI
Joint POW/MIA Accounting Cmd.
Fort Shafter, HI
9th Mission Spt. Cmd.
311th Sig. Cmd. (T)

U.S. Army Reserve

Fort McCoy, WI
88th Regional Spt. Cmd.
86th Tng. Div.

t Snelling, MN
72nd Eng. Gp.

Inkster, MI
300th MP Bde.

New Windsor, NY
411th Eng. Bde.

Fort Devens, MA
804th Med. Cmd.

Chicopee, MA
302nd MEB

Farmingdale, NY
800th MP Bde.

Des Moines, IA
103rd Sustainment Cmd. (E)

Fort Sheridan, IL
330th Med. Bde.
3rd. Bde., 75th Div.

Coraopolis, PA
316th Sustainment Cmd. (E)

Joint Base McGuire-Dix-Lakehurst, NJ
99th Regional Spt. Cmd.
78th Training Div.
2nd Bde., 75th Div.
244th Avn. Bde.

Staten Island, NY
353rd CA Cmd.

Twinsburg, OH
2nd PSYOP Gp.

Arlington Heights, IL
84th USAR Spt. Cmd. (West)

Backlick, OH
307th Med. Bde.

Gaithersburg, MD
USAR Legal Cmd.

Indianapolis, IN
310th Sustainment Cmd.

Darien, IL
416th Theater Eng. Cmd.

Fort Belvoir, VA
MI Readiness Cmd.

Fort Meade, MD
200th MP Cmd.
352nd CA Cmd.

Independence, MO
139th Med. Bde.

Rock Island, IL
USAR Spt. Cmd., First Army

Fort Knox, KY
100th Div.
84th Tng. Cmd.
11th Avn. Cmd. (T)

Richmond, VA
80th Tng. Cmd.

Fort Bragg, NC
USAR Cmd.

Nashville, TN
290th MP Bde.

Charlotte, NC
108th Tng. Cmd.

East Point, GA
335th Sig. Cmd. (T)

Fort Jackson, SC
81st Regional Spt. Cmd.

Birmingham, AL
USAR Deployment Spt. Cmd.
USAR Sustainment Cmd.
87th USAR Spt. Cmd. (East)
4th Bde., 75th Div.

Morrow, GA
USAR Careers Div.

Greenville, SC
415th Chemical Bde.

Vicksburg, MS
412th Theater Eng. Cmd.

Montgomery, AL
926th Eng. Bde.

Forest Park, GA
3rd Med. Cmd.

Fort Gordon, GA
359th Sig. Bde. (T)

Bryan, TX
0th Eng. Bde.

Fort Benning, GA
98th Div.

Houston/ gton Field, TX
sion Cmd. Tng. Div.
3de., 75th Div.

Pensacola, FL
350th CA Cmd.

Belle Chasse, LA
377th Theater Sustainment Cmd.

Orlando, FL
143rd Sustainment Cmd. (E)

Pinellas Park, FL
USA Reserve Medical Cmd.

Fort Buchanan, PR
1st Mission Spt. Cmd.

Puerto Rico

Army Forward Deployed Forces

Alaska

Alaska Cmd./
JTF Alaska

Guantanamo Bay, Cuba

Joint Task Force-
Guantanamo

South America/ Caribbean

Counter-Drug Operations
Support Elements

Germany

U.S. European Cmd.

Germany

7th Civil Spt. Cmd.

Belgium

Supreme HQ
Allied Powers Europe

Africa

U.S. Africa Cmd.
(Headquartered in Germany)

Key

- Active Army
- Army National Guard
- Army Reserve
- Unified Combatant Commands and Joint/Combined Headquarters

Germany

U.S. Army Europe
V Corps
2nd Cav. Rgt. (Stryker)
170th Infantry Bde. Cmbt. Team
172nd Infantry Bde. Cmbt. Team
12th Combat Avn. Bde.
10th Air & Missile Def. Cmd.

21st Theater Sustainment Cmd.
16th Sustainment Bde.
405th Army Field Spt. Bde.
5th Sig. Cmd.
2nd Sig. Bde.
7th Theater Tactical Sig. Bde.
USA NATO Bde.

18th MP Bde.
18th Eng. Bde.
19th Battlefield Coord. Det.
66th MI Bde.
30th Med. Cmd.
Seventh Army Joint Multinational Tng. Cmd.
USA Joint Multinational Readiness Ctr.
266th Finance Ctr.

USA Europe Rgnl. Med. Cmd.
USA Contrc. Cmd.-Eur.
202nd MP Gp. (CID)
Landstuhl Rgnl. Med. Cmd.
409th Contracting Spt. Bde.
598th Trans. Gp.

Italy

U.S. Army Africa-USA Southern European Task Force
173rd Abn. Bde. Cmbt. Team

Task Force Falcon

South Korea

U.N. Command
Combined Forces Cmd.
U.S. Forces Korea

Japan

U.S. Army Japan/
I Corps (Fwd.)

Third U.S. Army (Fwd.)
1st Theater Sustainment Cmd. (Fwd.)
Army Materiel Cmd. Southwest Asia
Area Spt. Gp.-Kuwait
595th Trans. Gp. (Fwd.)
160th Sig. Bde.

Afghanistan

NATO: International Security Assistance Force (ISAF)
NATO: ISAF Joint Cmd.
U.S. Forces Cmd.-Afghanistan
U.S. Combined Scty. Transition Cmd.-Afghanistan
Regional Cmd.-North
Regional Cmd.-South
Regional Cmd.-Southwest
Regional Cmd.-East
Regional Cmd.-West

South Korea

Eighth U.S. Army
2nd Inf. Div.
1st Heavy BCT,
2nd Inf. Div.
2nd Combat Avn. Bde.,
2nd Inf. Div.
210th Fires Bde.,
2nd Inf. Div.
65th Med. Bde.
19th Sustainment Cmd. (E)
501st Sustainment Bde.
35th ADA Bde.
501st MI Bde.
1st Sig. Bde.
411th Contracting Spt. Bde.
175th Fin. Mgmt. Ctr.
Materiel Spt. Ctr.-Korea

Okinawa, Japan

10th Area Spt. Gp.

The Sinai Peninsula

Task Force Sinai

Qatar

Area Spt. Gp.-Qatar

Horn of Africa

Joint Task Force-Horn of Africa

Afghanistan

Operation Enduring Freedom Task Forces

The Philippines

Operation Enduring Freedom Support Elements

Honoring our Army and Its Soldiers

The National Museum of the United States Army at Fort Belvoir, Virginia, will be the nation's one and only museum to present the Army's complete history since 1775. It will serve as the Army's national landmark, honor our Soldiers' service and sacrifice, and cultivate public appreciation for Army history and Army values. In short, the Museum will tell the Army story as if finally deserves to be told.

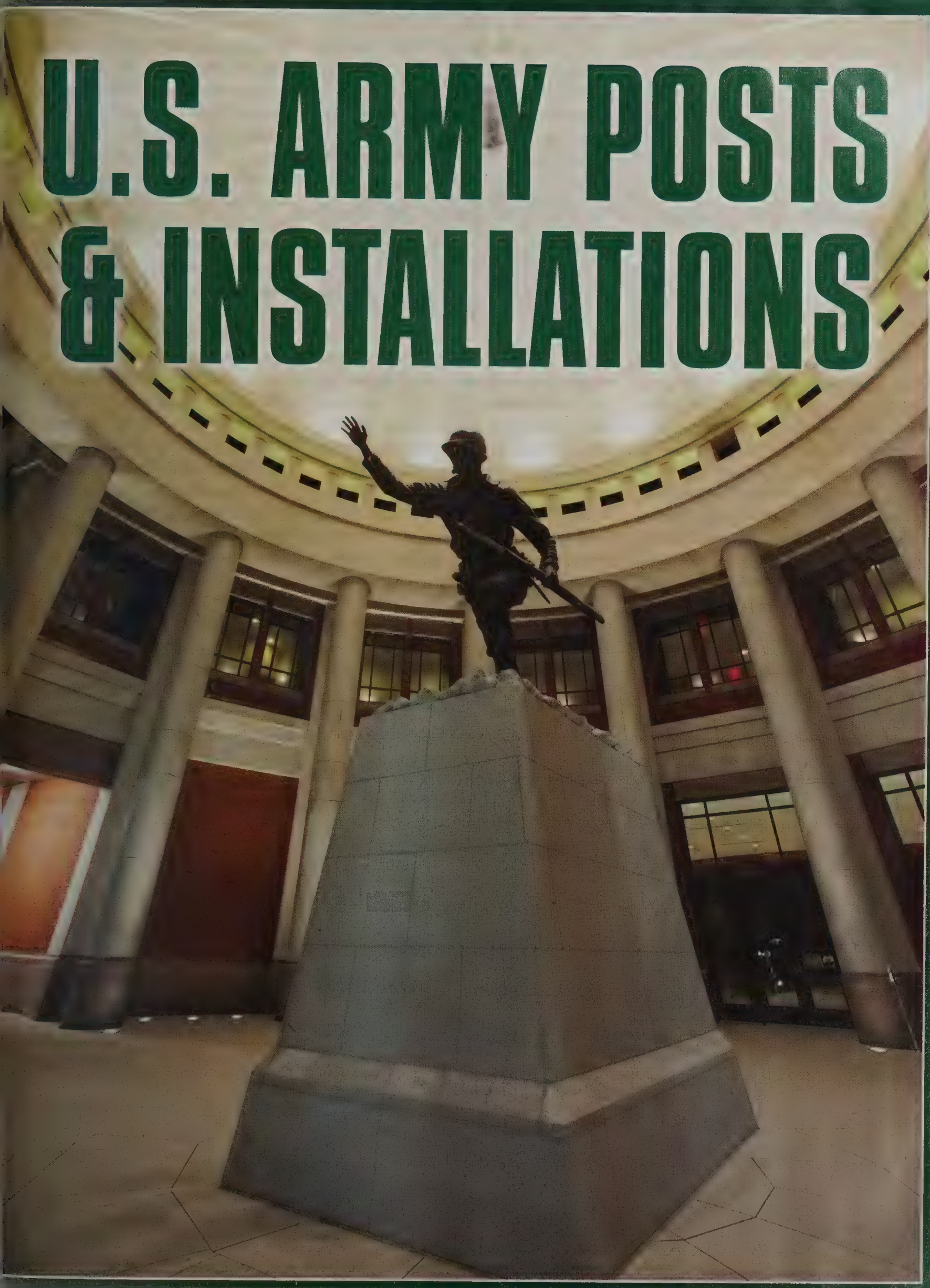
A great Army deserves a great Museum.

Please join us and others who are working together
to create this long-overdue tribute to our Army and its Soldiers.
For more information, call or visit us online.

NATIONAL MUSEUM
UNITED STATES
ARMY

1-800-506-2672
www.armyhistory.org

U.S. ARMY POSTS & INSTALLATIONS



This section includes posts and installations primarily supporting the active Army in the continental United States, Hawaii, Alaska and Puerto Rico.

Acreages reflect real estate under Department of the Army control in 2012.

The DSN and commercial telephone numbers listed are for operator assistance.

Information was supplied by each post or installation.

Aberdeen Proving Ground, MD 21005 and 21010. Opened 1917; home to more than 70 organizations, including Army Research, Development and Engineering Cmd.; Army Communications-Electronics Life Cycle Management Cmd.; 20th Support Cmd. (CBRNE); Army Public Health Cmd.; Army Developmental Test Cmd.; 22nd Chemical Battalion; CBRNE Analytical and Remediation Activity; Army Communications-Electronics Research, Development and Engineering Cmd.; Army Research Laboratory (Aberdeen site); Medical Research Institute of Chemical Defense; Aberdeen Test Center; Program Executive Office for Command, Control and Communications (Tactical); Chemical Material Agency; Army Materiel Systems Analysis Activity; Civilian Human Resources Agency-Northeast; Civilian Personnel Advisory Center; Army Evaluation Center; 2,061 mil., 11,631 civ. (including non-appropriated-fund employees), 4,281 contractors, 450 other personnel; 72,229 acres, 35 miles northeast of Baltimore. DSN: 298-5201; (410) 278-5201.

Anniston Army Depot, AL 36201-4199. Opened 1941; repairs and retrofits combat tracked vehicles, artillery and small arms; receives and stores general supplies, ammunition, missiles, small arms and strategic materiel; 59 mil., 6,825 civ. (including tenants and contractors); 15,000 acres adjacent to Pelham Range, 10 miles west of Anniston. DSN: 571-1110; (256) 235-7501.

Fort A.P. Hill, VA 22427. Opened 1941; named for LTG Ambrose Powell Hill, CSA; winner 2008 Army Communities of Excellence Award; 76,000-acre regional training center used for active and reserve component training of all service branches and federal agencies; 27,000-acre live-fire range complex; 3,044 mil. and civ., 422 reserve components. DSN: 578-8324/8120; (804) 633-8324/8120.

Fort Belvoir, VA 22060. Established 1912; named for the manor house of COL William Fairfax, 1736–1741, the ruins of which remain on the installation; home to 48,000 soldiers, sailors, airmen, marines and Department of Defense Employees and the installation support platform for the military leadership in the National Capital Region. Fort Belvoir's mission is to provide intelligence, medical, logistical, administrative and command-and-control support to more than 140 mission partners and satellite organizations; major tenants include the National Geospatial-Intelligence Agency; Fort Belvoir Community Hospital; Defense Logistics Agency; U.S. Army Cyber Command; U.S. Missile Defense Agency; U.S. Army Lega Services Agency; the Office of the Chief o Army Reserve; Defense Contract Audi Agency; Washington Headquarters Services Defense Threat Reduction Agency; Defense Acquisition University; U.S. Army Intelligence and Security Command; Defense Intelligence Agency; Night-Vision and Electronics Sensors Directorate; and the 29th Infantry Division o the Virginia Army National Guard; approx 8,000 mil., 40,000 civ. (including tenants and DoD contractors); 8,656 acres; 11 miles south west of Alexandria, Va., and 17 miles south west of Washington, D.C. Home to Davisor Army Airfield, Fort Belvoir controls four non contiguous properties that include the Mair Post at Mount Vernon, the Mark Center ir Alexandria, the Belvoir North Area in Spring field, and the Rivanna Station near Char lottesville, Va. DSN: 685-5001; (703) 805-5001

Fort Benning, GA 31905. Established 1918; named after BG Henry L. Benning, CSA; home of Maneuver Center of Excellence; Army Marksmanship Unit; 3rd Bde., 3rd Inf. Div.; Western Hemisphere Institute for Security Cooperation; 75th Ranger Rgt.; 199th Infantry Bde.; 197th Infantry Bde.; 192nd Infantry Bde.; 198th Infantry Bde.; 194th Armored Bde.; 316th Cav. Bde.; Martin Army Community Hospital; Medical Department Activity, Ranger Training Bde.; 30,638 mil., 4,300 civ.; 181,386 acres, 9 miles south of Columbus. DSN: 835-2011; (706) 545-2011.

Fort Bliss, TX 79916. Established as the post opposite El Paso in 1848; named after LTC William Wallace Smith Bliss; home of the 1st Armored Div. and 1st, 2nd, 3rd and 4th Brigade Combat Teams; 1AD Combat Aviation Bde.; 212th Fires Bde.; 15th Sustainment Bde.; Garrison Cmd.; Brigade Modernization Cmd.; U.S. Army Sergeants Major Academy; William Beaumont Army Medical Center; Joint Task Force North; 32nd Army Air and Missile Defense Cmd.; 11th Air Defense Artillery Bde. 5th Armored Bde.; 402nd Field Artillery Bde. German Air Force Cmd. (U.S. and Canada) German Air Force Air Defense Center; 32,000 mil., 6,500 civ.; 1.2 million acres. DSN: 978-0831; (915) 568-2121.

Blue Grass Army Depot, KY 40475-5001 Established 1941; a conventional ammunition depot with a rapid industrial response capability supporting add-on armor, combat vehicle accessory production, ammunition component production and a primary mission of performing standard depot operations (storage, receipt, inspection, maintenance and demilita

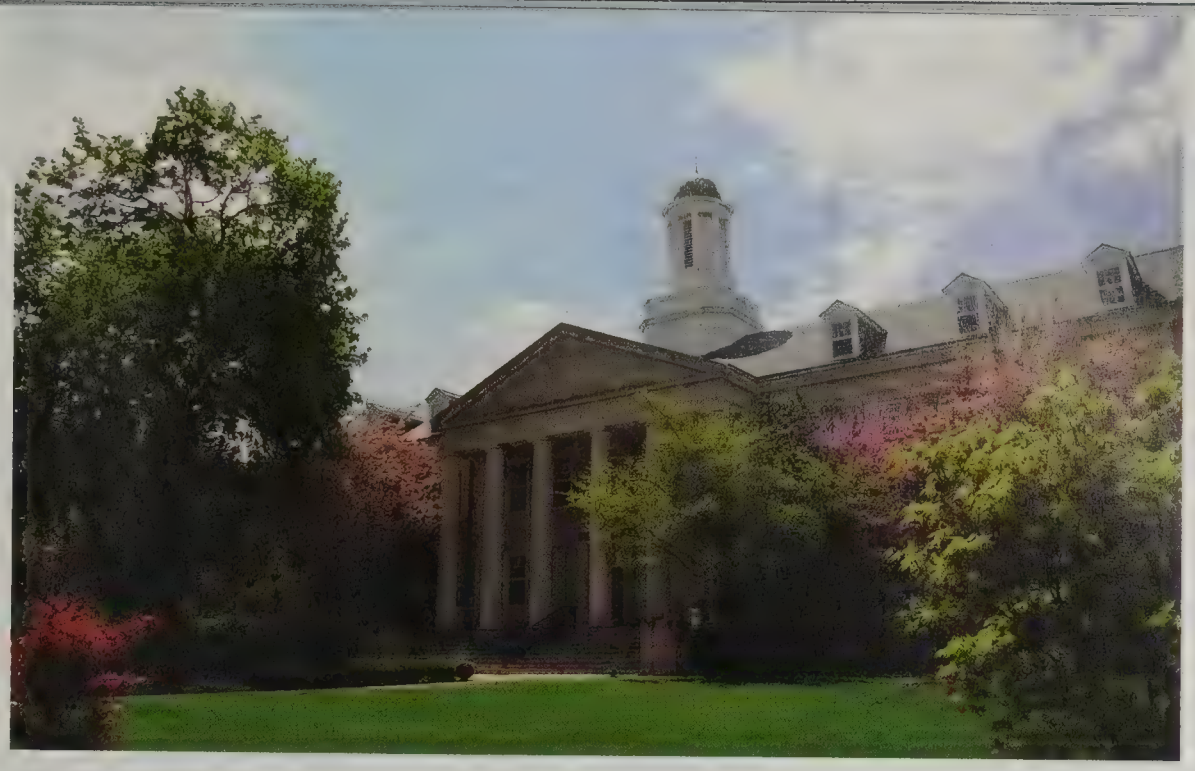
Aberdeen Proving Ground, Md.

rization) of conventional munitions, missiles, nonstandard ammunition and chemical defense equipment for all DoD services; approximately 1,000 personnel; 14,500 acres, 6 miles south of Richmond. DSN: 745-6221; (859) 779-6221.

Fort Bragg, NC 28310. Established as a field artillery site in 1918; named after then-MAJ Braxton Bragg, U.S. Army (who later served as a general in the CSA); as "Home of the Airborne and Special Operations Forces," houses U.S. Army Forces Cmd.; U.S. Army Rsv. Cmd.; 4th Training Bde.; XVIII Abn. Corps; 82nd Abn. Div.; 1st Support Cmd. (Theater); 108th ADA Bde.; 44th Medical Bde.; 16th MP Bde.; 525th Battlefield Surveillance Bde.; U.S. Army Spc. Ops. Cmd.; Joint Special Ops. Cmd.; U.S. Army Special Forces Cmd.; U.S. Army John F. Kennedy Special Warfare Center and School; U.S. Army Civil Affairs and Psychological Ops. Cmd.; U.S. Army Spc. Ops. Avn. Cmd.; 440th Air Rsv. Wing; 43rd Airlift Wing; 20th Engineer Bde.; the Golden Knights; Womack Army Medical Ctr.; 55,922 mil., 4,252 airmen, 11,344 civ.; 161,047 acres, 10 miles northwest of Fayetteville, 50 miles south of Raleigh. DSN: 236-0011; (910) 396-0011.

Fort Campbell, KY 42223. Opened 1942; named for BG William B. Campbell, a Tennessee hero of the Mexican War and governor of Tennessee; home of 101st Abn. Div. (Air Assault); 5th Spc. Forces Grp. (Abn.); 160th Spc. Ops. Aviation Rgt. (Abn.); 52nd Ordnance Group; 30,438 mil., 8,058 civ., 53,116 family members; 105,068 acres, 15 miles south of Hopkinsville, Ky., 10 miles northwest of downtown Clarksville, Tenn., and 50 miles northwest of Nashville. DSN: 635-1110; (270) 798-3025.

Carlisle Barracks, PA 17013. Established 1757; site of U.S. Army War College, the Army's leading institution for strategic leader development and for research and publication to inform strategic thought; fosters intellectual and professional growth of more than 1,000 select U.S. and international military and civilian students annually through several resident and distance education programs; educates leaders to understand the value of collaboration and partnerships, the significance of civil-military cooperation, the responsibility for shaping future national security policy and strategy, and the prudent application of land power and its contribution to a greater and lasting peace; site of Army Heritage and Education Center and Military History Institute Archives; 555 mil., 765 civ.; 459 acres, 18 miles southwest of Harrisburg. DSN: 242-3131; (717) 245-3131.



Carlisle Barracks, Pa.

Fort Carson, CO 80913. Established 1942; named for BG Christopher (Kit) Carson; home of 4th Inf. Div.; 10th Spc. Forces Grp. (Abn.); 4th Engineer Bn.; 52nd Engineer Bn.; 43rd Support Bde.; 10th Combat Spt. Hospital; 759th Military Police Bn.; 1/2 Aviation Recon. Bn.; 71st Ordnance Group (EOD); 26,000 mil., 5,800 civ.; 137,403 acres adjacent to Colorado Springs and 235,896 acres at Piñon Canyon Maneuver Site near Trinidad, Colo. DSN: 691-5811; (719) 526-5811.

Cold Regions Research and Engineering Laboratory, NH 03755-1290. Opened 1961; one of seven laboratories of the U.S. Army Engineer Research and Development Center; solves interdisciplinary, strategically important problems for the nation, the warfighter and the U.S. Army Corps of Engineers by advancing and applying science and engineering to complex environments, materials and processes in all seasons and climates; maintains unique core competencies related to the Earth's cold regions; 2 mil., 250 civ.; 31 acres at Hanover, N.H.; minimal staff at Anchorage, Alaska, and Fairbanks, Alaska, field offices. (603) 646-4100.

Construction Engineering Research Laboratory, IL 61826-9005. Established 1968; one of seven labs in the U.S. Army Engineer Research and Development Center; conducts research and development for the U.S. Army Corps of Engineers and Army programs in military facilities construction, operations, maintenance, energy conservation and environmental quality, including pollution prevention, compliance and natural resource management; 343 civ.; 33 acres at Champaign. (217) 352-6511.

Corpus Christi Army Depot, TX 78419-5260. Opened in 1961; returns Army rotary-wing aircraft and components to the fight with uncompromising quality, at the lowest possible cost, in the shortest amount of time possible; supports the Army's accident investigation processes with subject matter expertise and reliable laboratory analysis anywhere in the world; when required, assesses, evaluates and repairs forward-deployed aircraft and components anywhere in the world, to include forward capabilities; supports active, Reserve and National Guard maintenance skill development with hands-on experience at the depot; 3,619 civilians, approximately 2,112 contractors; 158 acres and 2.3 million square feet of industrial space as of October 1, 2011 (leased from Naval Air Station-Corpus Christi). DSN: 861-3627; (361) 961-3627.

Deseret Chemical Depot, UT 84074-5000. Established 1942; Army-operated; responsible for the safe, secure and environmentally correct storage and destruction of chemical agents; authorized strength: 2 mil., 400 govt. civilians, 1,000 contractors; 19,000 acres at Rush Valley, 40 miles southwest of Salt Lake City. (435) 833-4295. (Deseret Chemical Depot completed its mission on February 1, 2012, and is scheduled to join with Tooele Army Depot on July 11, 2013.)

Fort Detrick, MD 21702. Established 1943; named for MAJ Frederick Louis Detrick, local Army flight surgeon; community includes more than 50 tenant organizations representing five cabinet-level agencies and all armed services. The mission encompasses three major areas: medical research, strategic communications (signal) and defense medical logistics; approx. 1,900 mil., approx. 8,500 civ.; 1,341 acres at main post in Frederick and Forest Glen Annex in Silver Spring, Md. DSN: 343-8000; (301) 619-8000.

U.S. Army Garrison-Detroit Arsenal, Warren, MI 48397-5000. Established 1971; under the Installation Management Command-Central Region; provides installation support ser-

vices for Detroit Arsenal tenant organizations, including the U.S. Army TACOM Life Cycle Management Cmd.; Program Executive Office (PEO) Ground Combat Systems; PEO Combat Support and Combat Service Support; PEO Integration; and the Tank Automotive Research Development and Engineering Center; 230 mil., 7,800 civ.; 169 acres, 10 miles north of Detroit and 20 miles southwest of the Selfridge Air National Guard Base. DSN: 786-5000; (586) 282-5000.

Fort Drum, NY 13602. Established 1907; renamed for LTG Hugh A. Drum, commander, First Army, 1938–1943; 10th Mtn. Div. (Lt. Inf.); 19,978 mil., 4,614 civ.; 107,265 acres, 8 miles north of Watertown and 78 miles north of Syracuse. DSN: 772-6011; (315) 772-6011.

Dugway Proving Ground, UT 84022. Established 1942; performs test and evaluation of defensive chemical and biological materiel, environmental technology testing and meteorological and atmospheric transport modeling; 5 mil., 1,450 civ.; 798,218 acres, 85 miles southwest of Salt Lake City. DSN: 789-2116; (435) 831-2116.

Joint Base Elmendorf-**Richardson**. See Joint Bases.

Fort Eustis. See Joint Bases.

Gillem Enclave, GA 30297. Opened 1941; named for LTG Alvan C. Gillem Jr., Third Army Commander, 1947–50; site of 3rd Medical Cmd.; Army Criminal Investigation Laboratory; Military Entrance Processing Station; 1,170 members of active Army, Reserve and Guard; 284 civ.; 252 acres at Forest Park, 18 miles southeast of Atlanta. DSN: 797-5000; (404) 469-5000.

Fort Gordon, GA 30905. Opened 1941; named for LTG John Brown Gordon, CSA; home of the Army Signal Center of Excellence; Dwight David Eisenhower Army Medical Center; Headquarters, 7th Signal Cmd.; 15,100 mil., 8,700 civ.; 56,596 acres, 12 miles southwest of Augusta. DSN: 780-0110; (706) 791-0110.

Fort Hamilton, NY 11252. Established 1825 as part of the New York harbor battery defense system; named for Alexander Hamilton; headquartered by the Military District of Washington in Washington, D.C.; home to the New York City Recruiting Bn.; U.S. Army Corps of Engineers, North Atlantic Div. headquarters; New York Military Entrance Processing Station, which is responsible for processing about 16,000 applicants each year; 1179th Deployment Support Bde.; New York National Guard Task Force Empire Shield; serves as a secure federal location that provides administrative and logistical support for the Army, Defense Intelligence Agency, FBI, Secret Service, U.S. Marshals, Dept. of Homeland Security and other intelligence and counterterrorism agencies. DSN: 232-4101; (718) 630-4101.

Fort Hood, TX 76544. Opened 1942; named for GEN John Bell Hood, CSA; site of III Corps; 1st Cav. Div. (including 1st, 2nd, 3rd and 4th Bde. Combat Teams and 1st Air Cav. Bde.); 41st Fires Bde.; First Army Division West; Operational Test Cmd.; 3rd Armored Cav. Rgt.; 4th Combat Avn. Bde.; 13th Sustainment Cmd. (Expeditionary); 21st Cav. Bde.; 36th Engineer Bde.; 48th Chemical Bde.; 89th Military Police Bde.; 504th Battlefield Surveillance Bde.; 13th Financial Management Ctr.; 69th Air Defense Artillery; 31st Air Defense Artillery; 46,000 mil., 5,414 DA civ.; 340 square miles adjacent to Killeen, 60 miles north of Austin and 160 miles south of Dallas/Fort Worth. DSN: 737-1110; (254) 287-1110.

Fort Drum, N.Y.

Fort Huachuca, AZ 85613. Opened 1877; home of Army Intelligence Center of Excellence; Network Enterprise Technology Cmd.; Army Electronic Proving Ground; Information Systems Engineering Cmd.; 11th Sig. Bde.; Joint Interoperability Test Cmd.; 5,869 mil., 3,849 civ.; 73,242 acres, 75 miles southeast of Tucson. DSN: 821-7111; (520) 538-7111.

Hunter Army Airfield, GA 31409. Established 1940; named for Army Air Corps MG Frank O'Driscoll Hunter, a native of Savannah; supports 3rd Inf. Div., Combat Avn. Bde. and 1st Bn., 75th Ranger Rgt.; 3rd Bn., 160th Spc. Ops. Avn. Rgt.; 224th MI Bn.; USMC Reserve Center; 260th Quartermaster Bn.; 6th ROTC Bde.; USCG Air Station Savannah; 3rd Military Police Group; 6,200 mil., 600 civ.; 5,370 acres at Savannah. DSN: 729-5617; (912) 315-5617.

Fort Irwin, CA 92310. Established 1940; named for MG LeRoy Irwin, noted World War I artillery commander; home of the National Training Center; 11th Armored Cav. Rgt.; 916th Support Bde.; NTC Operations Group; 5,099 mil., 6,934 family members, 5,637 civ.; 768,000 acres, 37 miles northeast of Barstow. DSN: 470-4111; (760) 380-4111.

Fort Jackson, SC 29207. Established 1917; named for President Andrew Jackson; U.S. Army Training Center and Fort Jackson: conducts basic combat training and combat support advanced individual training; site of 165th, 171st and 193rd Infantry Bdes.; 81st Regional Readiness Cmd.; Soldier Support Institute; Armed Forces Chaplaincy Center; National Center for Credibility Assessment; Army Drill Sergeant School; Moncrief Army Community Hospital; 3,700 mil., 3,600 civ.; 52,301 acres adjacent to Columbia. DSN: 734-1110; (803) 751-1110.

Fort Knox, KY 40121 and 40122. Opened 1918; named for MG Henry Knox, Revolutionary War hero and first Secretary of War; home of the U.S. Army Human Resources Cmd.; U.S. Army Cadet Cmd.; U.S. Army Recruiting Cmd.; 3rd Brigade Combat Team, 1st Infantry Div.; 3rd Sustainment Cmd. (Expeditionary); 4th Cav., 1st Army Div.; 84th Training Cmd.; 100th Div.; Army Reserve Readiness Training Center; 113th Army Band (the Dragoons); and the General George Patton Museum of Leadership; 10,000 mil., 11,500 civ.; 109,054 acres, 35 miles southwest of Louisville. DSN: 464-1000; (502) 624-1000.

Joint Base Langley-**Eustis**. See Joint Bases.

Fort Leavenworth, KS 66027. Established 1827; named for COL Henry Leavenworth, commander of the 3rd Inf. Rgt. when the post was founded; home of Mission Command Center of Excellence, Mission Command Training Program, Combined Arms Center, U.S. Army Command and General Staff College, Center for Army Lessons Learned, Combined Arms Doctrine Directorate, U.S. Army and Marine Corps Counterinsurgency Center, 35th Inf. Div. (ARNG), U.S. Disciplinary Barracks, Midwest Joint Regional Correctional Facility; 3,384 mil., 4,452 family members, 2,731 DA civilians, 650 inmates; 5,634 acres adjacent to Leavenworth, 20 miles northwest of Kansas City International Airport. DSN: 552-4021; (913) 684-4021.

Fort Lee, VA 23801. Opened in 1917 as Camp Lee; named for GEN Robert E. Lee, a career Army officer and combat engineer; home to the Combined Arms Support Command and Sustainment Center of Excellence, the headquarters component that provides oversight of the U.S. Army Quartermaster, Ordnance and Transportation Schools, the Army Logistics University and the Soldier Support Institute; major tenant organizations include the 49th Quartermaster Group, Defense Commissary Agency and Defense Contract Management Agency; 4,694 mil., 3,401 civ., 2,799 contractors, 13,249 military family members and a daily student population of 9,623; 5,907 acres, located three miles east of Petersburg. DSN: 539-3000; (804) 765-3000.

Fort Leonard Wood, MO 65473. Opened 941; named for MG Leonard Wood, Army Chief of Staff, 1910–14; home of the U.S. Army Maneuver Support Center of Excellence, which ncludes the U.S. Army Chemical, Biological, Radiological and Nuclear, Engineer, and Military Police schools, a gender-integrated Basic Training Brigade, one of the five reception stations in the Army for newly accessed soldiers, nd the largest Noncommissioned Officers Academy in the Army; 4th Maneuver Enhancement Bde.; 94th Engineer Bn.; 5th Engineer Bn.; 92nd MP Bn.; 193rd Brigade Support Bn.; Directorate for Counter Improvised Explosive Devices; continuing responsibilities include consolidated and joint chemical, engineer, military police and motor transport operators training with the Navy, Marines, Air Force and Coast Guard; 7,100 active duty mil., 88,400 mil. for training (annual), 9,000 civ.; 61,400 cres, 88 miles northeast of Springfield, 135 miles southwest of St. Louis. DSN: 886-0131; 573) 596-0131.

Letterkenny Army Depot, PA 17201-4150. Opened 1942; named after Letterkenny Township, which the depot absorbed; home of the Army's Center of Industrial and Technical Excellence for Air Defense and Tactical Missile Systems and Mobile Electronic Power Generation Equipment; Depot Source of Repair for Route Clearance Vehicles as well as the Sentinel Radar System; Patriot Recertification; High Mobility Artillery Rocket Systems; Aviation Ground Power Units; Route Clearance Vehicles; Humvee Recapitalization; Force Provider reset operations; conducts storage, issue, rebuilding, testing, overhauling and demilitarization of equipment, tactical missiles and ammunition; 3 mil., 1,738 civ. and 1,212 contract employees; 18,668 acres, 5 miles north of Chambersburg and 50 miles southwest of Harrisburg. DSN: 570-8111; (717) 267-8111.

Joint Base **Lewis**-McChord. See Joint Bases.

Joint Base McGuire-**Dix**-Lakehurst. See Joint Bases.

Joint Expeditionary Base Little Creek-**Story**. See Joint Bases.

Fort McPherson was inactivated on September 15, 2011, as a result of Base Realignment and Closure.

Fort Meade, MD 20755. Established 1917; named for MG George Gordon Meade, commander of the Army of the Potomac, 1863–65; home of National Security Agency; Defense Information Systems Agency; Defense Media Activity; Defense Information School, Asymmetric Warfare Group, First Army Division East; 90 other installation partners; 11,000 mil., 39,000 civ.; 5,067 acres, 15 miles north-east of Washington, D.C. DSN: 622-6261; (301) 677-6261.

Fort Monmouth was inactivated on September 15, 2011, as a result of Base Realignment and Closure.

Fort Monroe was inactivated on September 15, 2011, as a result of Base Realignment and Closure.

Joint Base **Myer**-Henderson Hall. See Joint Bases.

Picatinny Arsenal, NJ 07806-5000. Established 1880; researches and develops advanced technology armament and munitions systems for joint military services and provides life-cycle engineering support for munition systems; home of the Joint Center of Excellence for Guns and Ammo and the Joint Munitions and Lethality Life Cycle Mgmt. Cmd.; Army Contracting Command of New Jersey; Armament Research, Development and Engineering Center; Network Enterprise Command Picatinny; Program Executive Office, Ammunition; and Project Manager Soldier Weapons; 5,200 civilian and military personnel; 6,500 acres, located 32 miles west of New York City. DSN: 880-4021; (973) 724-4021.

Pine Bluff Arsenal, AR 71602-9500. Established 1941; produces, stores and demilitarizes conventional ammunitions; center for illuminating and infrared munitions; produces smoke munitions; Army Center for Industrial and Technical Excellence; produces, repairs and stores chemical/biological defense products; approx. 5 mil., 1,400 civ.; 13,500 acres, 8 miles northwest of Pine Bluff. DSN: 966-3000; (870) 540-3000.

Pohakuloa Training Area, HI 96720-4607. Established 1956; named for the Hawaiian

Fort Leavenworth, Kan.

Redstone Arsenal, Ala.

word for "long stone"; supports training of active Army, Marine Corps, reserve component and joint/combined forces in the Pacific region; 2 mil., 190 civ.; 134,000 acres, 36 miles northwest of Hilo on the island of Hawaii. DSN: 315-969-2427; (808) 969-2427.

Joint Readiness Training Center & Fort Polk, LA 71459. Established 1941; named for Confederate LTG Leonidas Polk, who was killed in action at Kennesaw Mountain, Ga., in 1864; home of the Joint Readiness Training Center; 4th BCT, 10th Mountain Div., 1st Maneuver Enhancement Bde.; 162nd Infantry Bde., 115th Combat Support Hospital; and Bayne Jones Army Community Hospital; 10,001 mil., 1,962 civ., 4,511 contractors; 198,555 acres, 2 miles south of Leesville. DSN: 863-1110; (337) 531-2911.

U.S. Army Garrison, Presidio of Monterey, CA 93944-5006. Established 1847; home of the Defense Language Institute Foreign Language Center, with each military service providing servicemembers as students, faculty and staff; houses the majority of the language instruction along with a small housing area; additional military housing, PX and commissary are located at the Ord Military Community, part of the former Fort Ord; 75 miles south of San Jose International Airport. DSN: 768-6912; (831) 242-6912.

Pueblo Chemical Depot, CO 81006-9330. Established 1942; stores chemical munitions; 23,000 acres at Pueblo. DSN: 749-4111; (719) 549-4111.

Red River Army Depot, TX 75507-5000. Established 1941; repairs, overhauls, remanufactures and converts combat/tactical wheeled vehicles; operates DoD's only road wheel and track-shoe rebuild/manufacturing facility; home of MRAP University; 2 mil., 3,500 civ., 2,500 contractors; 14,000 acres, 18 miles west of Texarkana and 80 miles northwest of Shreveport, La. DSN: 829-2141; (903) 334-2141.

Redstone Arsenal, AL 35898-5020. Established 1941; named for the red soil of the region; home to more than 55 different federal and DoD organizations; core missions of the arsenal include Materiel Management and Acquisition; Space Operations and Missile Defense; Intelligence and Homeland Defense; and Research, Development, Test & Evaluation; U.S. Army Space and Missile Defense Cmd.; U.S. Army Aviation and Missile Cmd.; U.S. Army Materiel Cmd.; U.S. Army Security Assistance Cmd.; U.S. Army Contracting Cmd.; U.S. Army Expeditionary Contracting Cmd.; Program Executive Office (PEO) Missiles and Space; PEO-Aviation; FBI Hazardous Devices School; ATF's National Ctr. for Explosives Training and Research; Aviation Missile Research, Development and Engineering Ctr.; Redstone Test Ctr.; Missile Defense Agency; Defense Intelligence Agency-Missile and Space Intelligence Ctr.; NASA's Marshall Space Flight Ctr.; 1,000 mil., 35,000 civ. and contractors; 38,000 acres adjacent to southwest Huntsville. DSN: 746-2151; (256) 876-2151.

Fort Riley, KS 66442. Established 1853; named for MG Bennett Riley, who led the first military escort along the Santa Fe Trail; home of the 1st Inf. Div.; 1st HBCT; 2nd HBCT; 4th IBCT; 1st Combat Avn. Bde.; 1st Sustainment Bde.; 18,000 mil., 8,500 civ. employees; 100,656 acres; 125 miles west of Kansas City, Mo. DSN: 856-3911; (785) 239-3911.

Rock Island Arsenal, IL 61299. Established 1862; home to Headquarters, Army Sustainment Cmd., and Headquarters, 1st Army; Rock Island Arsenal Civilian Personnel Advisory Center for the East Region and North Central Area; Rock Island Arsenal Joint Manufacturing and Technology Center; 400 mil., 8,900 civ.; 946-acre island in the Mississippi River between Rock Island, Ill., and Davenport, Iowa. DSN: 793-6001; (309) 782-6001.

Rocky Mountain Arsenal, CO 80022. Established 1942; responsible for contamination cleanup; 15 civ.; 1,038 acres in Commerce City, 10 miles northeast of Denver. DSN: 749-2300; (303) 289-0300.

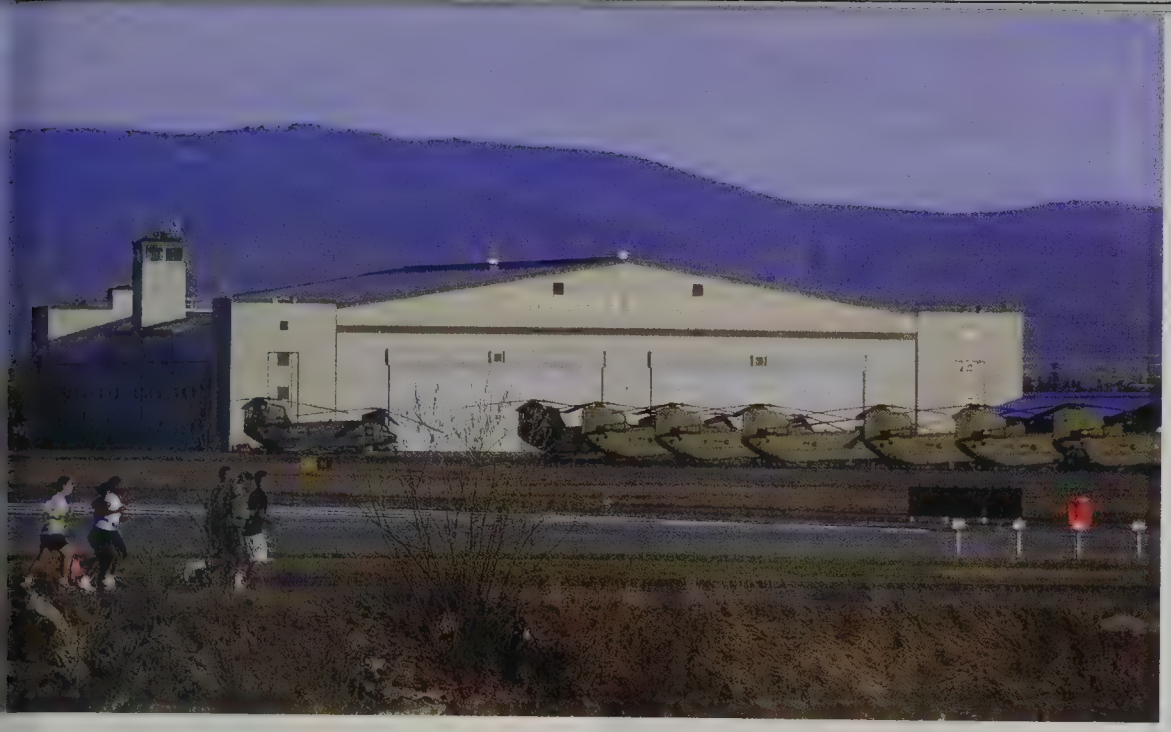
Fort Rucker, AL 36362-5000. Established 1942; named for COL Edmund W. Rucker, CSA, Confederate cavalry leader; home of U.S. Army Aviation Center of Excellence; Army Aviation Museum; Army Warrant Officer Career College; U.S. Army Combat Readiness/Safety Center; Army Aeromedical Center; Army Aeromedical Research Laboratory; Army School of Aviation Medicine; 5,584 mil., 7,496 civ.; 63,072 acres; located 75 miles south of Montgomery. DSN: 558-1110; (334) 255-1110.

Fort Sam Houston. See Joint Bases.

Schofield Barracks, HI 96857. Established 1909; named for LTG John McAllister Schofield, commander in chief of the Army, 1888–1895, whose recommendations led to the first U.S. military presence in the islands; home of the 25th Inf. Div.; U.S. Army Garrison-Hawaii, located at Wheeler Army Airfield, which supports 22 installations; and various tenant units; approx. 19,500 mil., 4,275 civ.; more than 15,000 acres, 17 miles northwest of Honolulu. DSN: 315-456-7110; (808) 449-7110.

Fort Shafter, HI 96858. Established 1907; named for MG William R. Shafter, Civil War hero and Spanish-American War corps commander; home of U.S. Army Pacific; 8th Theater Sustainment Cmd.; 311th Signal Cmd. (Theater); 9th Mission Support Cmd.; 94th Army Air and Missile Defense Cmd.; 196th Inf. Bde.; Installation Management Cmd.-Pacific Region; Army Corps of Engineers-Pacific Div.; and various tenant units; 4,561 mil., 2,531 civ.; 589 acres near Honolulu. DSN: 315-456-7110; (808) 449-7110.

Sierra Army Depot, Herlong, CA 96113-5000. Established 1942; a 36,000-acre Joint Strategic Power Projection Platform providing a wide variety of long-term, life-cycle sustainment solutions for the joint services (from equipment receipt and asset visibility, to long-term care, storage and sustainment, to repair/reset of all Army fuel and water systems, and on-demand rapid deployment from the organic airfield); Sierra's dry climate and moderate desert temperatures allow the natural benefit of low-cost outside or Indoor storage without the need for energy-sponsored controlled environments; 1,200 civ.; 55 miles north/northwest of Reno, Nev. DSN: 855-4343; (530) 827-4343.



Fort Wainwright, Alaska

Fort Sill, OK 73503. Established 1869; amed for BG Joshua W. Sill, Union comman- er; home of the Fires Center of Excellence; ir Defense Artillery School; Field Artillery chool; 428th and 434th Field Artillery Bdes.; 14th Fires Bde.; 75th Fires Bde.; 30th Air De- nse Artillery Bde.; 31st Air Defense Artillery de.; 95th Training Div.; 16,000 mil., 7,200 civ.; 4,000 acres, adjacent to Lawton. DSN: 639- 111; (580) 442-8111.

Fort Stewart, GA 31314. Established 1940; amed for BG Daniel Stewart, Georgia militia fficer in the Revolutionary War; home of 3rd f. Div.; approx. 20,000 mil., approx. 3,500 civ.; 79,000 acres at Hinesville, 40 miles south- est of Savannah. (912) 767-1110.

Sunny Point Military Ocean Terminal-outhport, NC 28461. Established 1955; ome of the 596th Transportation Bde., which ommands Military Ocean Terminal Sunny oint (MOTSU), Southport, N.C., and the 34th Transportation Bn., Military Ocean Termi- al Concord, Concord, Calif.; provides the na- on with 75 percent of total surface ammunition roughput capabilities; 3 mil., 280 civ.; 16,435 res. DSN: 488-8000; (910) 457-8000.

Tobyhanna Army Depot, PA 18466-5000. stablished 1953; DoD's largest facility for the pair, modification, test, design, fabrication nd integration of the full spectrum of com- and, control, communications, computers, telligence, surveillance and reconnaissance C4ISR) systems, and missile guidance and ntrol and other specialized systems; desig- ated the Army Center of Industrial and Tech- cal Excellence for C4ISR and Electronics, ionics and Missile Guidance and Control stems; Air Force Technology Repair Center Command, Control, Communications and telligence; manages and operates 76 for- ard repair facilities worldwide; approx. 13 l., 4,600 gov. civ., 859 contractors; 1,300 acres at Tobyhanna, 20 miles southeast of Scranton. DSN: 795-7000; (570) 615-7000.

Tooele Army Depot, UT 84074-5000. Established 1942; receives, stores, issues, demilitarizes and renovates conventional ammunition; designs, manufactures, fields and maintains ammunition-peculiar equipment; 1 mil., 484 civ.; 23,000 acres near Tooele City (pronounced "too-ella"), 35 miles southwest of Salt Lake City. DSN: 790-2211; (435) 833-2211.

Tripler Army Medical Center, HI 96859. Established 1920; named for BG Charles Stuart Tripler, medical director of the Army of the Potomac during the Civil War; largest military medical treatment facility in the Pacific Basin; performs inpatient and outpatient medical services; more than 4,000 military, civilian and contractor personnel; 360 acres, near Honolulu. (808) 433-6661/6662.

Umatilla Chemical Depot, OR was deactivated July 17, 2012. The installation is managed and maintained through the Office of the Installation Commander at Joint Base **Lewis-**McChord, WA. Final disposition will be managed by Army BRAC.

U.S. Army Soldier Systems Center, Natick, MA 01760. Commonly known as Natick Labs, this facility performs research and development in core technologies for all the services—textile technology, interactive textiles, nanotechnology, biotechnology, airdrop technology, food science, human physiology and warrior systems integration—and develops, manages, fields and sustains products and systems to support all military services; 20 miles west of Boston. (508) 233-5340.

Fort Wainwright, AK 99703. Established 1961; named for GEN Jonathan M. Wainwright, hero of Bataan; home of 1st Stryker Brigade Combat Team, 25th Inf. Div.; 1,336 civ., 9,097 family members; 1,599,738 acres adjacent to Fairbanks. DSN: (317) 353-1110; (907) 353-1110.

Walter Reed Army Medical Center was inactivated on September 15, 2011, as a result of Base Realignment and Closure. See Joint Bases.

Watervliet Arsenal, NY 12189-4000. The nation's oldest continuously operated arsenal, having begun operations in 1813; it is widely known as "America's Arsenal;" this Army-owned and Army-operated manufacturing center is ISO 9001:2008-certified; with its partner, the U.S. Army's Benét Laboratories, Watervliet is DoD's manufacturer of choice specializing in cannons, mortars, associated

Tobyhanna Army Depot, Pa.

Yuma Proving Ground, Ariz.

materiel and other complex machined items for the U.S. Armed Forces, allied countries and commercial industry; 31 military and civilian tenant organizations; 72 buildings and more than 1 million square feet of manufacturing space; 1 mil., 875 civ. with the Arsenal and Benét Laboratories; located on 143 acres about 7 miles north of Albany. DSN: 374-5111; (518) 266-5111.

Waterways Experiment Station, MS 39180. Established 1929 by the Army Corps of Engineers; headquarters of the U.S. Army Engineer Research and Development Center; home to four of seven USACE laboratories: Coastal and Hydraulics, Geotechnical and Structures, Environmental, and Information Technology; provides technology solutions for the warfighter, military installations, water resources and environmental issues for USACE, DoD and the nation; home of USACE Reachback Operations Center, supporting all hazard contingency operations worldwide; home to one of five major DoD high performance computing centers; Army R&D Laboratory of the Year eight of the last ten years; 10 mil.; 1,700 civ.; 673 acres in Vicksburg, MS. (601) 634-3111.

West Point, NY 10996. Oldest continuously garrisoned military installation in the United States; first garrisoned by the Continental Army in January 1778; home of the U.S. Military Academy since March 16, 1802, and the Center for the Army Profession and Ethic (formerly the Army Center of Excellence for the Professional Military Ethic) since May 2008; more than 5,500 mil. (including 4,400 members of the U.S. Corps of Cadets), 2,600 civ.; 16,000 acres on the west bank of the Hudson River, 55 miles north of New York City. DSN 688-4011; (845) 938-4011.

White Sands Missile Range, NM 88002. Established 1945; national test range; 1,093 mil., 2,459 civ., 4,058 contractors; 3,200 square miles with main facilities 27 miles east of Las Cruces, 40 miles north of El Paso, Texas. DSN: 258-2121; (575) 678-2121.

Yakima Training Center, WA 98901. Established 1941; subinstallation of Joint Base **Lewis**-McChord, Wash.; supporting joint and combined arms maneuver training and ranges for active and reserve component units and allies; 150 mil., 400 civ.; 327,000 acres, 8 miles northeast of Yakima, 168 miles southeast of Tacoma. DSN: 638-3205; (509) 577-3205.

Yuma Proving Ground, AZ 85365. Established 1943; performs multipurpose testing for many types of weapon systems and munitions; 150 mil., 2,850 civ.; 1.3 million acres with main facilities 26 miles northeast of Yuma. DSN: 899-2151; (928) 328-2151.

Joint Bases

This listing includes active joint posts and installations.

Joint Base Elmendorf-**Richardson**, AK 99506. Managed by the 673rd Air Base Wing; home to the Alaskan Command; U.S. Army Alaska; 4th Brigade Combat Team (Abn.), 25th Inf. Div.; 2nd Eng. Bde.; 6,610 soldiers, 6,710 airmen, 2,920 civ.; 84,530 acres. DSN: (317) 552-8151/8152.

Joint Base Langley-**Eustis**, VA 23604. Established 1918; named for Bvt. BG Abraham Eustis, Virginia native and veteran of the War of 1812; home of Training and Doctrine Command Headquarters; Army Training Support Center; Aviation Applied Technology Directorate; 128th Avn. Bde.; 7th Sustainment Bde.; 7,800 mil., 5,700 civ.; 8,248 acres adjacent to Newport News and 11 miles southeast of Williamsburg. DSN: 826-5251; (757) 878-5251.

Joint Base **Lewis**-McChord (formerly Fort Lewis and McChord AFB), WA 98433. Established 1917; named for CPT Meriwether Lewis (of the Lewis and Clark Expedition) and COL William Caldwell McChord, former Chief of the Training and Operations Division in HQ Army Air Corps; home of I Corps; Headquarters, 7th Inf. Div.; 2nd Bde., 2nd Inf. Div.; 3rd Bde., 2nd Inf. Div.; 4th Bde., 2nd Inf. Div.; 16th Combat Avn. Bde.; 593rd Sustainment Bde.; 201st Battlefield Surveillance Bde.; 62nd Medical Bde.; 189th and 191st Inf. Bdes.; 42nd MP Bde.; 1st Special Forces Group (Abn.); 2nd Bn., 75th Ranger Rgt.; 66th Theater Avn. Cmd.; 4th Bn. 160th Special Operations Avn. Rgt. (Abn.); 404th Army Field Support Bde.; 6th MP Group (CID); U.S. Army Cadet Cmd.'s 8th ROTC Bde.; Western Regional Medical Cmd.; Madigan Healthcare System; Public Health Command Region-West; Yakima Training Center; 41,975 mil. (including 31,702 active Army personnel), approximately 15,000 civilian employees; more than 90,000 acres (414,000 acres including Yakima Training Center), 10 miles southeast of Tacoma. DSN 357-1110; 253 967-1110.

Joint Expeditionary Base Little Creek-**Story**, Virginia Beach, VA 23459. Established October 1, 2009; composed of the former Army Garrison of Fort Story (established in 1914) and the Naval Amphibious Base Little Creek (established in 1947) under joint basing; expeditionary and logistics-over-the-shore training site for active and Reserve Army, Marine Corps and Navy components; national joint training asset; only base that meets nearly all Navy Special Warfare training requirements; 155 resident commands; 16,465 mil., 5,852 civ.; 3,947 acres between both properties. DSN: 253-7358; (757) 462-7385/7386.

Joint Base McGuire-**Dix**-Lakehurst, NJ 08641. DSN: 650-1100; (609) 754-1100.

Joint Base **Myer-Henderson Hall**, VA 22211. Established 1862 as Fort Whipple, renamed Fort Myer in 1887 for BG Albert J. Myer, first chief of the Army Signal Corps; home of the 3rd U.S. Inf. Rgt. (The Old Guard); The U.S. Army Band (Pershing's Own); 8,000 mil., 1,374 civ.; 270 acres adjacent to the Arlington National Cemetery across the Potomac River from Washington, D.C. DSN: 426-0596; (703) 696-0596. Joint base command includes **Fort McNair**, Washington, D.C. 20319. Established in 1791; named for GEN Lesley J. McNair, Army ground forces commander killed in Normandy, 1944; home of the U.S. Army Military District of Washington; Joint Force Headquarters-National Capital Region; National Defense

University; Center of Military History; Inter-American Defense College; the Commander-in-Chief's Guard (Company A, 3rd U.S. Inf. Rgt., The Old Guard); 108 acres in southwest Washington, D.C. DSN: 426-0596; (703) 696-0596. **Henderson Hall,** VA 22214. With Marine Corps expansion during World War II, a Headquarters and Service Company was organized at Henderson Hall on March 1,1942; named for Col. (Brevet B. Gen.) Archibald Henderson, fifth commandant of the Marine Corps; provides administrative, operational, logistical and quality-of-life services in support of more than 2,000 marines and civilians of Headquarters Marine Corps. DSN: 224-2014; (703) 614-2014.

Fort Sam Houston-Joint Base San Antonio, TX 78234. Established 1876; named for the first elected president of the Republic of Texas; headquarters to U.S. Army Medical Cmd.; U.S. Army North/Fifth Army; U.S. Army South; 5th Recruiting Bde.; 12th ROTC Bde.; San Antonio Military Entrance and Processing Station; 937th AF Training Readiness Group; Installation Management Cmd.; Army Medical Department Center and School; Brooke Army Medical Ctr.; Headquarters, Dental Cmd.; the Institute of Surgical Research; the Defense Medical Readiness Training Institute; 470th Military Intelligence Bde.; 106th Signal Bde.; 410th Contracting Bde.; Center for Health Promotion and Preventive Medicine; DoD Medical Education and Training Campus; Navy Medicine Training Support Ctr.; Military Installation and Contracting Cmd., including the 410th and 412th Contracting Bdes.; Southern Regional Medical Cmd.; Battlefield Health and Trauma Ctr.; Public Health Command-South Region; Tri-Service Research Laboratory; more than 12,000 mil. and civ. personnel; approx. 3,000 acres at San Antonio, 28,000 acres at subinstallation Camp Bullis, 35 miles northwest. DSN: 471-1211; (210) 221-1211.

Walter Reed National Military Medical Center, MD 20889. Established November 10, 2011, as a result of the Base Realignment and Closure Act; consolidated National Naval Medical Center and Walter Reed Army Medical Center on the grounds of the former NNMC campus in Bethesda, Md.; largest military medical center in the United States; tertiary care destination providing services in more than 100 clinics and specialties; more than 7,000 staff; 243 acres; 131.65 average daily patient load (2011); (301) 295-4611.

Major Reserve Component Training Sites

This listing does not include active posts maintained by the Army primarily for reserve component training; these will be found in the directory of active Army installations. Reserve component units also conduct a portion of their annual training on federal posts that are continuously occupied by active Army units. Commercial telephone numbers are for operator assistance at the sites listed; DSN numbers are for military points of contact.

Camp Guernsey Joint Training Center, Wyo.

Camp Atterbury Joint Maneuver Training Center, Edinburgh, IN 46124. DSN: 569-2499; (812) 526-1499.

Camp Blanding Joint Training Center, Starke, FL 32091-9703. DSN: 822-3462; (904) 682-3462.

Camp Bowie MTC Complex, Brownwood, TX 76801. (512) 782-7362.

U.S. Army Garrison-Fort Buchanan, Puerto Rico 00934. DSN: 740-3400; (787) 707-3400.

Fort Chaffee Maneuver Training Center, Fort Chaffee, AR 72905. (479) 484-2121.

U.S. Army Garrison-Fort Devens, Devens, MA 01434-4424. DSN: 256-2126; (978) 796-2126.

Joint Base **McGuire-Dix-Lakehurst**. See Joint Bases.

Camp Edwards, Mass. Mil. Res., MA 02542-5003. DSN: 557-5885; (508) 968-5885.

Gowen Field, Boise, ID 83705. DSN: 422-5755; (208) 422-5755.

Camp Grayling Joint Maneuver Training Center (Heavy), MI 49739-0001. DSN: 623-3100; (989) 344-6100.

Camp Gruber Joint Maneuver Training Center, Braggs, OK 74423-0029. DSN: 628-6001; (918) 549-6001.

Camp Guernsey Joint Training Center, Guernsey, WY 82214-0399. DSN: 344-7786; (307) 836-7786.

U.S. Army Garrison Fort Hunter Liggett, CA 93928. (831) 386-2505.

Fort Indiantown Gap, Annville, PA 17003-5002. DSN: 491-2000; (717) 861-2000.

Los Alamitos Army Airfield, Los Alamitos, CA 90720-5146. DSN: 972-2571; (562) 795-2571.

Fort McCoy, WI 54656-5000. DSN: 280-1110; (608) 388-2222.

Parks Reserve Forces Training Area, Parks RFTA, CA 94568. (925) 875-4650.

Camp Perry Joint Training Center, Port Clinton, OH 43452. (614) 336-6214.

Fort Pickett-Army National Guard Maneuver Training Center, Blackstone, VA 23824-9000. DSN: 438-8621; (434) 292-8621.

Camp Ravenna Joint Military Training Center, Newton Falls, OH 44444. (614) 336-6660.

Camp Rilea, Warrenton, OR 97146-9711. DSN: 355-4000; (503) 836-4000.

Camp Ripley-Minnesota National Guard Training Center, Little Falls, MN 56345-4173. DSN: 871-3122; (320) 616-3122.

Camp Roberts Maneuver Training Center, San Miguel, CA 93451-5000. DSN: 949-8000; (805) 238-3100.

Robinson Maneuver Training Center, North Little Rock, AR 72199-9600. DSN: 962-5100; (501) 212-5100.

Camp Santiago Joint Maneuver Training Center (Light), Salinas, Puerto Rico 00751. (787) 824-7400/7432.

Camp Shelby Joint Forces Training Center, MS 39407-5500. DSN: 558-2000; (601) 558-2000.

Camp Sherman Joint Training Center, Chillicothe, OH 45601. (614) 336-6460.

Camp Swift, Bastrop, TX 78602-9737. (512) 782-7114.

Camp W.G. Williams, Riverton, UT 84065-4999. DSN: 766-5400; (801) 878-5400.

The FN Advanced Carbine (FNAC).

Reliable, Light, Affordable. Army Strong.

With more than 120 years of combat experience, FN continues to bring the most innovative technology to the front lines.

Reliable

- Based on the combat proven FN SCAR® weapons platform which endured more than 3 million rounds fired during development and testing
- Hammer-forged chrome-lined barrel
- Relentlessly reliable in the most adverse environmental conditions
- The FNAC works—first time, every time, all the time

Light

- Advanced polymer stock and lower receiver
- Aircraft grade aluminum alloy monolithic upper receiver

Affordable

- FNAC's overall lifecycle cost is far less than existing rifle platforms
- Reduced logistical cost while enhancing operation capability
- Uses standard future ammunition and subsystems

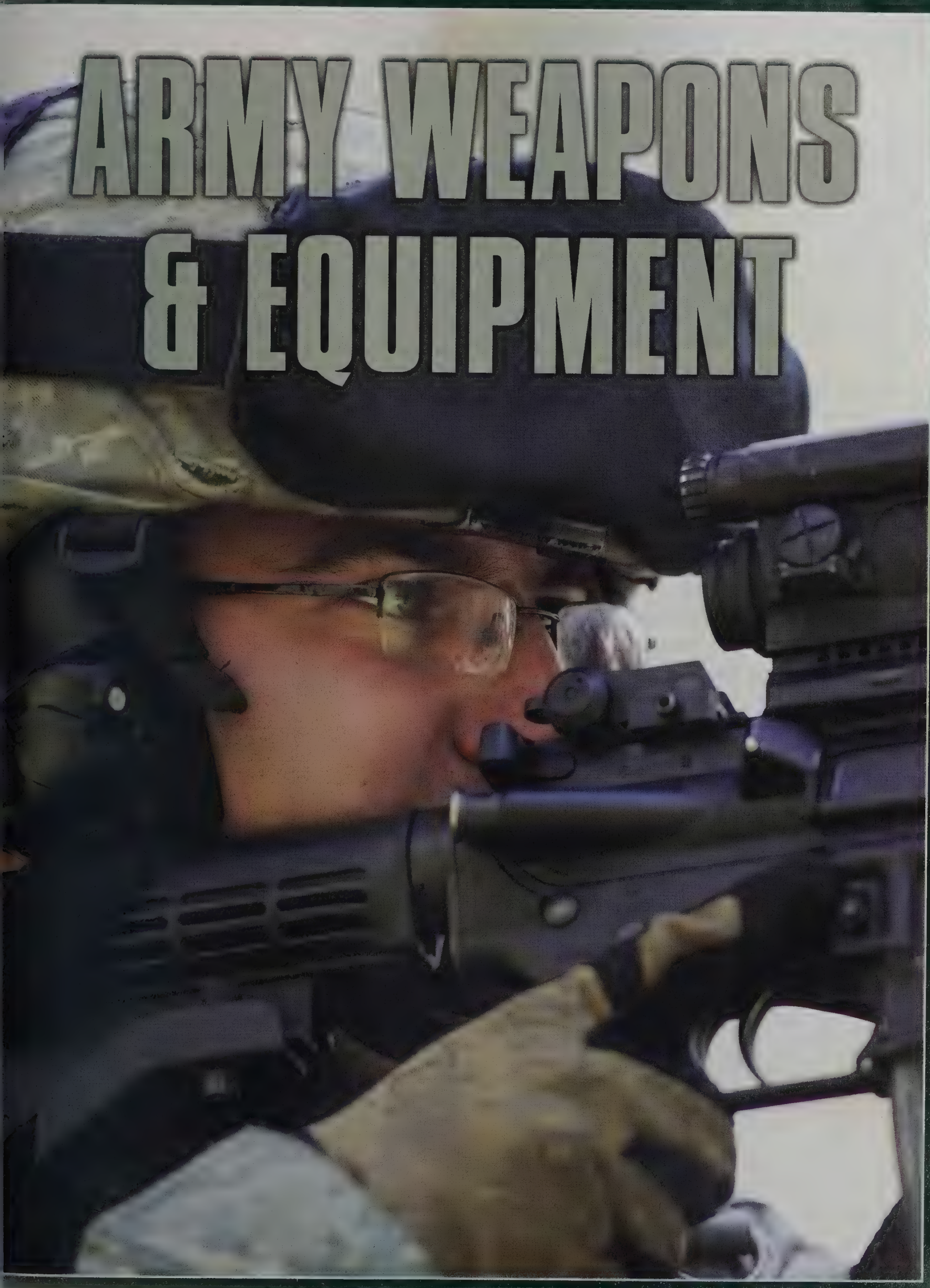
ARMY STRONG.

The FN Advanced Carbine's degree of excellence evolves from its effectiveness in tactical deployment validated by exhaustive testing for reliability, accuracy and durability. Expect the same high performance under extreme conditions with ease of maintenance as proven and seen in all FN SCAR® weapons. With the FNAC, our commitment with the next and most innovative weapon to protect our

FNH USA

Distinct Advantage

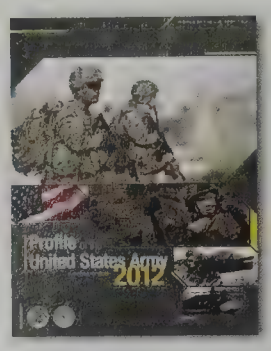
ARMY WEAPONS & EQUIPMENT

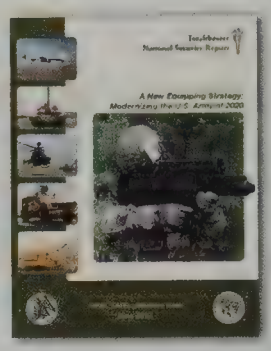


PUBLICATIONS
from the Institute of Land Warfare

Land Warfare Papers
- LWP 89 – Distilling the Demographic Dividend: Retaining U.S. Army Officer Talent for the 40-year Career? by Lieutenant Colonel Kevin D. Stringer (June 2012)[1]
- LWP 88W – The Spider Webs and the Lion: How Energy and Environmental Issues Entangle China by Colonel Mark Lee (May 2012)[2]
- LWP 87 – Historical Lessons Applied to the Current Technical Revolution in Military Affairs by Major Benjamin Huebschman (March 2012)[1]
- LWP 86 – Applying Natural System Metaphors to the Force Modernization Process by Colonel K. Todd Chamberlain (February 2012)[1]

National Security Watch
- NSW 12-4 – Earned Deferred Compensation by Nicholas R. Krueger (August 2012)[1]
- NSW 12-3 – Linking Latin America and the Pacific: A Strategy for the Long Term by Douglas J. Schaffer (July 2012)[1]
- NSW 12-2 – The Rationale for a Robust U.S. Army Presence in the Pacific Basin by Nicholas Krueger (March 2012)[1]
- NSW 12-1W – Thinking About the 21st Century Security Environment: The Need for a Whole-of-Government Approach by General Gordon R. Sullivan, USA Ret. (January 2012)[2]





NCO Update
- Summer Brings Free Passes and Special Deals to Servicemembers[3] (3rd Quarter 2012)[1]
- Budget Cuts Affect NCOs' Reenlistment Opportunities[3] (2nd Quarter 2012)[1]
- Tax Credits to Benefit Veterans Signed into Law[3] (1st Quarter 2012)[1]
- Three NCO Leaders Honored With Strickland Award[3] (4th Quarter 2011)[1]

Special Reports
- Profile of the U.S. Army 2012: a reference handbook (June 2012)[1]
- AUSA + 1st Session, 112th Congress = Some Good News (January 2012)[1]
- Fiscal Year 2012 Army Budget – An Analysis (October 2011)[1]
- Your Soldier, Your Army: A Parents' Guide by Vicki Cody (also available in Spanish)[1]

Torchbearer National Security Reports
- A New Equipping Strategy: Modernizing the U.S. Army of 2020 (June 2012)[1]
- Modernizing LandWarNet: Empowering America's Army (May 2012)[1]
- U.S. Army Space Capabilities: Enabling the Force of Decisive Action (May 2012)[1]

Torchbearer Issue Papers
- First Army: Training for Today's Requirements and Tomorrow's Contingencies (April 2012)[1]
- Third Army: Empowering Theater Responsiveness by Synchronizing Operational Maneuver (March 2012)[1]

Torchbearer Alerts
- Breaking the Faith (February 2012)[1]
- U.S. Army Retirees: Retired Pay and Health Care at Risk (September 2011)[1]

Defense Reports
- DR 11-4 – Unleashing Unlimited Potential: The Army Warrior Care and Transition Program in 2011 (October 2011)[1]

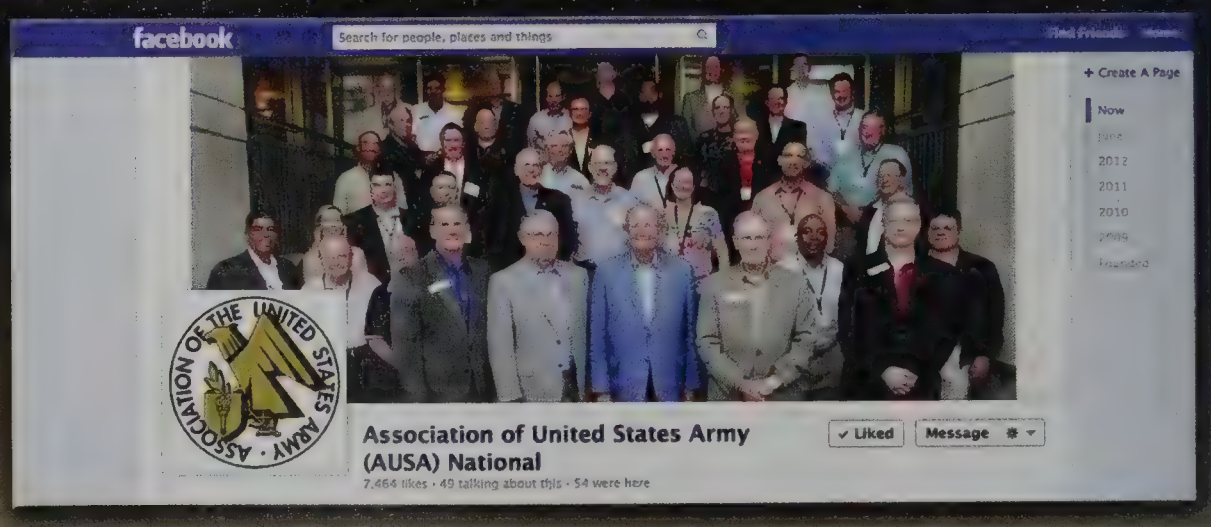
Landpower Essays
- LPE 11-2 – Laying the Groundwork for the Army of 2020 by General Robert W. Cone (August 2011)[1]

All publications are available free of charge at:
www.ausa.org/publications/ilw

To order these and other ILW publications, visit the Institute of Land Warfare at the AUSA website (www.ausa.org); send an e-mail to **ILWPublications@ausa.org**; call (800) 336-4570, ext. 4630; or write to AUSA's Institute of Land Warfare, ATTN: Publication Requests, 2425 Wilson Boulevard, Arlington, VA 22201-3326.

[1] Available on AUSA website at www.ausa.org/ilw.
[2] Available ONLY on AUSA website at www.ausa.org/ilw.
[3] Lead story.

AUSA is on Facebook



Association of the United States Army (AUSA) National

Go to the AUSA website: www.ausa.org

Click on Find us on Facebook ***at the bottom of the page.***

If you have a Facebook page, become an AUSA "friend."

To become a friend, you must have a Facebook account.

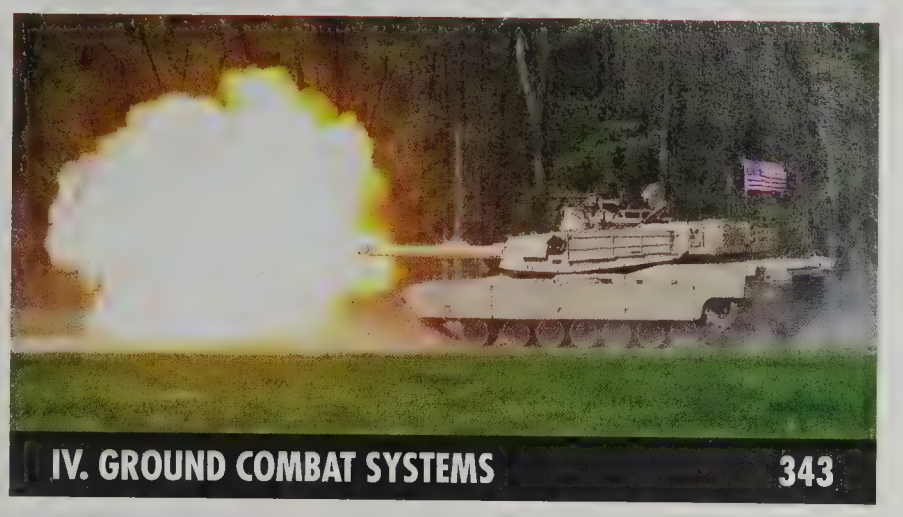
Contents

The 2012 ARMY *Green Book* Weapons and Equipment Directory continues its own transformation in providing a glimpse of some representative systems supporting today's warfighters.

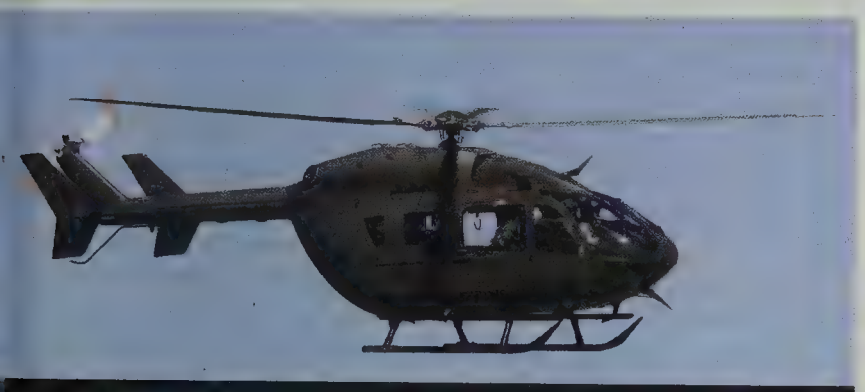
Significant changes in this year's directory include a restructuring of some sections and the introduction of a new element within the Command, Control, Communications, Computers and Intelligence (C4I) Systems section outlining aspects of the Capability Set 13 (CS 13), which is planned for initial fielding starting this month.

As in past years, the directory has attempted to balance representative examples of both existing and emerging systems to provide readers with a broad appreciation of warfighter capabilities—today and tomorrow. Preparation assistance and support received from program offices throughout the Army are greatly appreciated.

Due to emerging technologies and unfolding budgetary decisions, many new program listings will have to wait until next year's directory. In the meantime, the 2012 Weapons Directory remains a work in progress. Comments and suggestions regarding the ongoing transformation of these reference pages are always welcome.



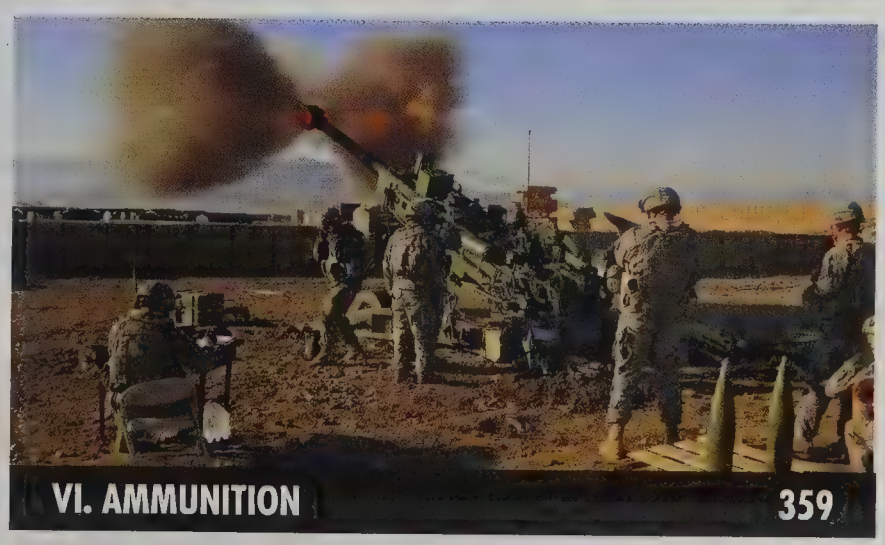
IV. GROUND COMBAT SYSTEMS 343



I. AIRCRAFT 314

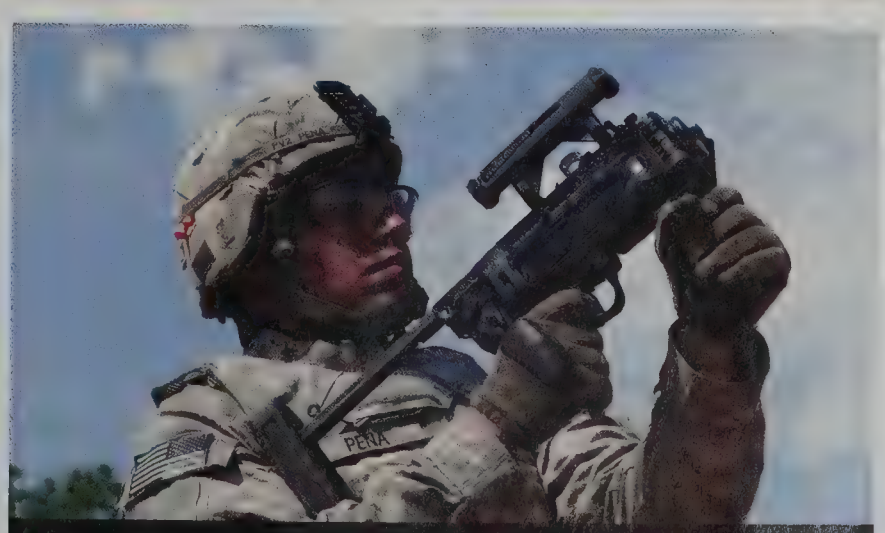
V. COMBAT SUPPORT AND COMBAT SERVICE SUPPORT 350

II. MISSILES AND SPACE PROGRAMS 326



VI. AMMUNITION 359

III. COMMAND, CONTROL, COMMUNICATIONS, COMPUTERS AND INTELLIGENCE (C4I) SYSTEMS AND CAPABILITY SET 13 333



VII. INDIVIDUAL EQUIPMENT AND WEAPONS 364

AIRCRAFT

Rotary Wing

The **AH-64 Apache Longbow Helicopter** provides day, night and adverse weather attack helicopter capability. The Apache is the Army's primary attack helicopter. It is a quick-reacting, airborne weapon system that can fight both close and deep to destroy, disrupt or delay enemy forces. There are four versions of the Apache aircraft: the original AH-64A Apache and the Apache Longbow Block I, II and III.

The AH-64A Apache first entered service inventories in 1984. The aircraft is designed to fight and survive throughout the world. It is equipped with a target acquisition designation sight and a pilot night vision sensor that permit its two-person crew to navigate and attack in darkness and adverse weather. The Apache's principal mission is to destroy high-value targets with the Hellfire missile. It also is capable of employing a 30 mm M230 chin-mounted automatic cannon and Hydra 70 rockets that are lethal against a variety of targets.

The Apache has a maximum speed of 145 knots. It has a maximum gross weight range of 240 nautical miles (A model) and 230 nautical miles (D model) with range extension capability using internal and external tanks. The Apache has a full range of aircraft survivability equipment and the ability to withstand hits from rounds up to 23 mm in critical areas. Apache ordnance consists of the Hellfire Missile (RF/SAL versions), 2.75-inch rockets (all versions) and 30 mm HEI rounds.

The **AH-64D Longbow Block II** is being fielded through a combination of new production and remanufacture of AH-64A aircraft. The AH-64D incorporates the Longbow fire-control radar (FCR), capable of being used day or night, in adverse weather and through battlefield obscurants. The AH-64D consists primarily of the integration of a mast-mounted millimeter-wave fire-control radar, a radar frequency interferometer and a radar frequency fire-and-forget Hellfire missile. Block II fielding will be complete in fiscal year (FY) 2013.

The Longbow's digitized target acquisition system provides automatic detection, location, classification, prioritizing and target handover. The AH-64D cockpit is redesigned to digitize and multiplex all systems. The manpower and personnel integration (MANPRINT) program crew stations have multifunction displays to reduce crew workload and increase effectiveness. The AH-64D provides a truly coordinated rapid-fire (16 separate targets within one minute) capability to the maneuver force commander on a 24-hour basis and in any conditions.

The newest version of the Longbow fleet is the **AH-64D Apache Longbow Block III**. The Block III program had its first aircraft delivery in November 2011. The Block III program, similar to the previous Apache sustainment programs, will update, or remanufacture, existing aircraft in the fleet to this more capable version of the Apache Longbow.

Slated for unit fielding beginning in 2012, the Block III will feature: Future Modular Force connectivity—seamless global information grid communications; Level IV unmanned aircraft system control; increased survivability—extended range sensors and weapons; a cognitive decision-aiding system; improved aircraft performance; and reduced operations and support cost and logistics footprint.

The **CH-47F Improved Cargo Helicopter (ICH)** is in full-rate production and in the fifth year of a five-year multiyear contract. It is being procured through both new-build and remanufactured processes.

AH-64 Apache Longbow helicopter

The Boeing Company's CH-47F helicopter features a newly designed, modernized airframe, a Rockwell Collins common avionics architecture system cockpit and a BAE digital advanced flight control system. The advanced avionics provide improved situational awareness for flight crews with an advanced digital map display and a data transfer system that allows storing of pre-flight and mission data. Improved survivability features include common missile warning and improved countermeasure dispenser systems.

Powered by two 4,868-hp Honeywell engines, the new CH-47F can reach speeds greater than 175 mph and transport payloads weighing more than 21,000 pounds. The CH-47F with the Robertson Aviation extended-range fuel system has a mission radius greater than 400 miles.

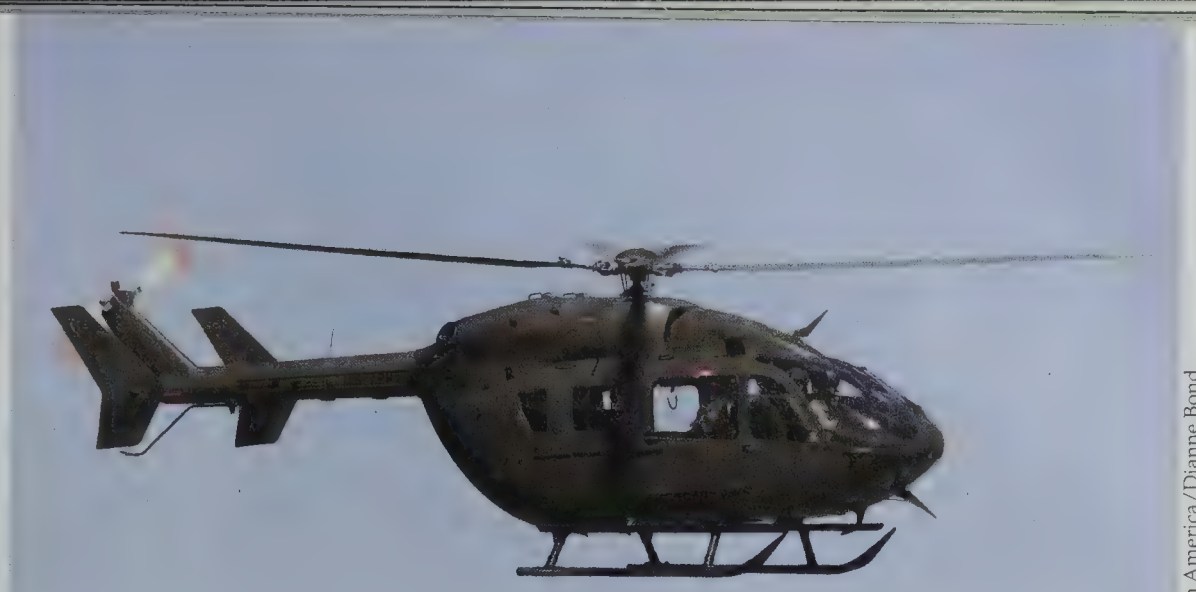
First unit fielding of the CH-47F began in July 2007. To date, the project office has fielded and equipped eight active units and three National Guard units.

The **Kiowa Warrior** utilizes a thermal imaging system, a low-light television and a laser rangefinder/designator in a mast-mounted sight situated above the main rotor. The aircraft is equipped with a variety of weapon systems including Hellfire, 2.75-inch rockets and a .50-caliber machine gun. The aircraft operates autonomously at standoff ranges providing armed reconnaissance, command and control, and target acquisition/designation for Apache helicopters and other airborne weapons platforms in day, night, and adverse weather conditions. The active Army and the National Guard fly Kiowa Warriors.

The **OH-58F Kiowa Warrior Cockpit and Sensor Upgrade Program (CASUP)** was approved to ensure the soldier has the latest mission equipment technology and to guarantee it remains a viable asset in the nation's arsenal through 2025. The OH-58F program remains on schedule and recently completed a successful critical design review (CDR) in March 2012 and post-CDR assessment in April 2012. The first unit equipped will be in FY 2016. The most significant system and aircraft modernizations focus on eliminating obsolescence and reducing aircraft weight, and include major upgrades to the sensor, aircraft avionics, survivability equipment, electrical system, software, cockpit displays and master processor hardware. The most noticeable outward change is the relocation of the sensor from the mast to the nose of the airframe.

The **UH-60 Black Hawk Helicopter** is the workhorse of Army Aviation with more than 6.5 million hours flown. The UH-60 platform accounts for approximately 50 percent of the Army's annual flying hours with a fleet of more than 2,000 aircraft. The UH-60 Black Hawk provides the Army with air assault, general sup-

port, command and control, and medevac capabilities. It has enhanced the overall mobility of the Army through its dramatic improvements in troop capacity and cargo-lift capability. An entire fully equipped, 11-person infantry squad can be lifted in one aircraft faster and in inclement weather conditions, allowing ground commanders to quickly shift forces to increase battlefield operational tempo to overmatch the enemy's. The Black Hawk can also reposition a 105 mm howitzer, its crew of six and up to 30 rounds of ammunition in a single lift, allowing the rapid massing of overwhelming combat power.



UH-72A Lakota light utility helicopter

EADS North America/Dianne Bond

The **HH-60 (Medevac)** configuration meets the need for an improved evacuation platform for tactical, en route patient care and evacuation. The **HH-60M Black Hawk** is in production and serves as the Army's medevac helicopter for the current and Future Force and is in line with the Army's modernization strategy, the National Military Strategy and National Defense Strategy.

The **UH-60M** enhances the commander's ability to conduct nonlinear, simultaneous, fully integrated operations in order to decisively mass the effects of the Army's warfighting assets. The UH/HH-60M configuration provides digital connectivity for enhanced situational awareness and improved lift, range, deployability, and survivability to further increase the commander's ability to conduct air assault, general support, command and control, and aeromedical evacuation. The **MH** version supports unique Special Forces roles and missions including a gunship variant identified as the MH-60 Direct Action Penetrator.

The **UH-72A Lakota** is the newest helicopter to enter service with the Army. The Lakota is being fielded to both the active Army and the National Guard. As of early 2012, more than 200 Lakotas have been produced.

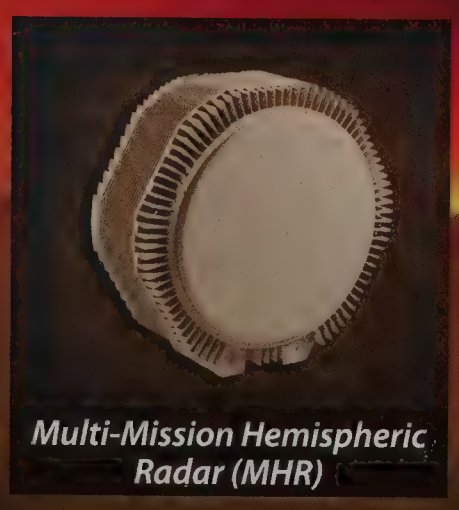
The Lakota provides operational capability for focused logistics and full dimensional protection related to homeland security and support operations. The light utility helicopter provides the flexibility to respond to terrorism, conduct civil search and rescue, support damage assessment, support test activities and training centers, perform medical evacuation, and support counterdrug operations. The Army will receive 345 UH-72As to replace aging UH-1 and OH-58A/C aircraft and free up 23 UH-60 Black Hawk aircraft for use in the warfight. In the past year, two new mission equipment packages (MEPs) have been added to the Lakota to enhance its capabilities. These are the Security and Support (S&S) Battalion MEP for the National Guard and the Combined Test Center (CTC) MEP.

The past two years have seen the highest rates of production and deliveries. The UH-72A has been fielded to the three

The Ultimate Combat Threat Management:

TACTICAL RADARS for the WARFIGHTER

Compact Hemispheric Radar (CHR)



Multi-Mission Hemispheric Radar (MHR)

- Software defined, AESA antenna, hemispheric coverage
- Family of multi-mission solutions:
  - All classes of hostile fire
  - All types of aerial vehicles
  - All kinds of surface and air border intruders

RADA
Innovative Defense Electronics
www.rada.com
E-mail: mrkt@rada.com

Training and Readiness Centers since May 2007. The National Guard medevac units have completed fielding and continue to receive Lakotas with the S&S Battalion MEP. The UH-72A has been provided to units in 20 states and two territories. The UH-72A fleet has already flown more than 95,000 flight hours with operational availability rates greater than 90 percent. In the next three years, the remaining aircraft will be placed on contract with the last delivery planned for June 2016.

The UH-72A is also unique in that it uses contractor logistics support (CLS) for its maintenance. Active Army units receive full CLS, while the National Guard has implemented a hybrid form that allows Guard soldiers to conduct field-level maintenance. The program also utilizes contractor-provided new equipment training, allowing the aircraft to quickly enter service. The UH-72A program has been a major success, meeting all its cost, schedule and performance goals.

Unmanned Aircraft Systems (UAS)

The **Army Unmanned Aircraft Systems (UAS)** fleet currently consists of four programs of record, focused on combatant commander and soldier capabilities that result in a flexible, adaptable and lethal combined fighting force. Infantry, scout, intelligence, aviation, artillery, maneuver and even medical units benefit from the availability and overall effectiveness of UAS. Missions include, but are not limited to, reconnaissance, surveillance and target acquisition (RSTA), battle damage assessment, targeting, persistent stare for around-the-clock lethal and nonlethal operations, convoy protection, route clearance and anti-ambush (improvised explosive device). As the Army becomes leaner and more agile, the UAS fleet will be shaped with commensurate capabilities and versatility.

The **MQ-1C Gray Eagle UAS**, manufactured by General Atomics Aeronautical Systems provides a real-time responsive capability to conduct long-dwell, wide-area, RSTA, communications relay, Signals Intelligence, and attack missions (up to four Hellfire missiles) and will be the mainstay of the division/corps commander's battle set for land warfare operations. The program is currently in the production and deployment phase, with two quick reaction capability units deployed in support of combat operations in Operation Enduring Freedom (OEF) and the first complete operational company deployed to OEF in March 2012.

The approved future company configuration will allow each of the three platoons to operate from separate locations, increasing operational flexibility and survivability. Important attributes of the Gray Eagle UAS are: 3,600-pound maximum gross weight, electro-optical/infrared, laser rangefinder/designator, synthetic aperture radar (SAR)/ground moving target indicator (GMTI), dual automatic takeoff and landing systems, triple redundant flight processors, redundant flight controls, near-all-weather capability and heavy fuel engine (JP-8). In addition, Gray Eagle has successfully demonstrated up to level of interoperability (LOI) 4 with the AH-64 Apache block III in recent manned/unmanned teaming exercises at Dugway Proving Ground, Utah, and El Mirage, Calif., and executed numerous Hellfire missions in Afghanistan either autonomously or collaboratively by launching a missile for remote designation, or providing target designation for another shooter.

The **MQ-5B Hunter UAS**, manufactured by Northrop Grumman, is the Army's longest-serving UAS, having served in Kosovo, Operation Iraqi Freedom and OEF. In conjunction with operations in multiple theaters, Hunter has been the workhorse for integration and demonstration efforts. The Army has installed, demonstrated or tested more than 23 different payloads on the Hunter, making it one of the most versatile UAS in the inventory. The Hunter air vehicle is a fixed-wing, twin-tail boom aircraft with a dual rudder. The Hunter is capable of 18-hour flight duration with an electro-optic/infrared (EO/IR) sensor or eight hours with a 250-pound payload. The EO/IR—the main payload for the Hunter—provides not only eyes on target but also laser designation to support manned/unmanned teaming operations.

A system of many firsts, Hunter is one of the most airworthy unmanned aircraft because of its dual-engine systems. It was the first to provide a heavy fuel engine to the commander in support of a common fuel on the battlefield; the first weaponized Army UAS platform; and the first to provide communication relay payloads and Signals Intelligence to the fight, making it one of the most sought-after aircraft on the battlefield. This flexibility comes from the Hunter's center wing section with hard points that support 130 pounds each, facilitating weapons or additional payloads. When not utilized for a payload, the center wing can be loaded with 110 liters of fuel.

The **Sky Warrior A and Gray Eagle Block 0** aircraft, both produced by General Atomics Aeronautical Systems, are pre-production systems to the Army Gray Eagle program of record. The initial Sky Warrior A systems were produced in 2003 and fielded within six months of contract award. The Gray Eagle Block 0 systems became operational in Iraq in 2008. The systems consist of two unmanned aircraft, a single ground control station (GCS), and associated ground support and datalink equipment. The systems provide the commanders up to 22 hour-a-day operations, can carry more than 450 pounds of payload and have a service ceiling of 25,000 feet mean sea level. Since initial deployment, these aircraft have received a number of upgrades including beyond-line-of-sight, weaponization and reliability modifications. The systems carry a number of different payloads and are used daily for rest-reduction efforts for the programs of record.

The **RQ-7B Shadow Tactical UAS**, manufactured by AAI, is the Army brigade commander's UAS. The Army's deputy chief of staff, G-3 has directed that every maneuver brigade in Operation Enduring Freedom be equipped with the tactical UAS (TUAS) system.

The Shadow system consists of four unmanned aircraft with day/night EO/IR, laser rangefinder/designator and communications relay payload capabilities, two GCS mounted on Humvees with ground data terminals, one portable ground control station with portable ground data terminal, two tactical automated landing systems, two launchers, and two unmanned aircraft transports mounted on Humvees, with personnel and additional ground support equipment transported in four addi-

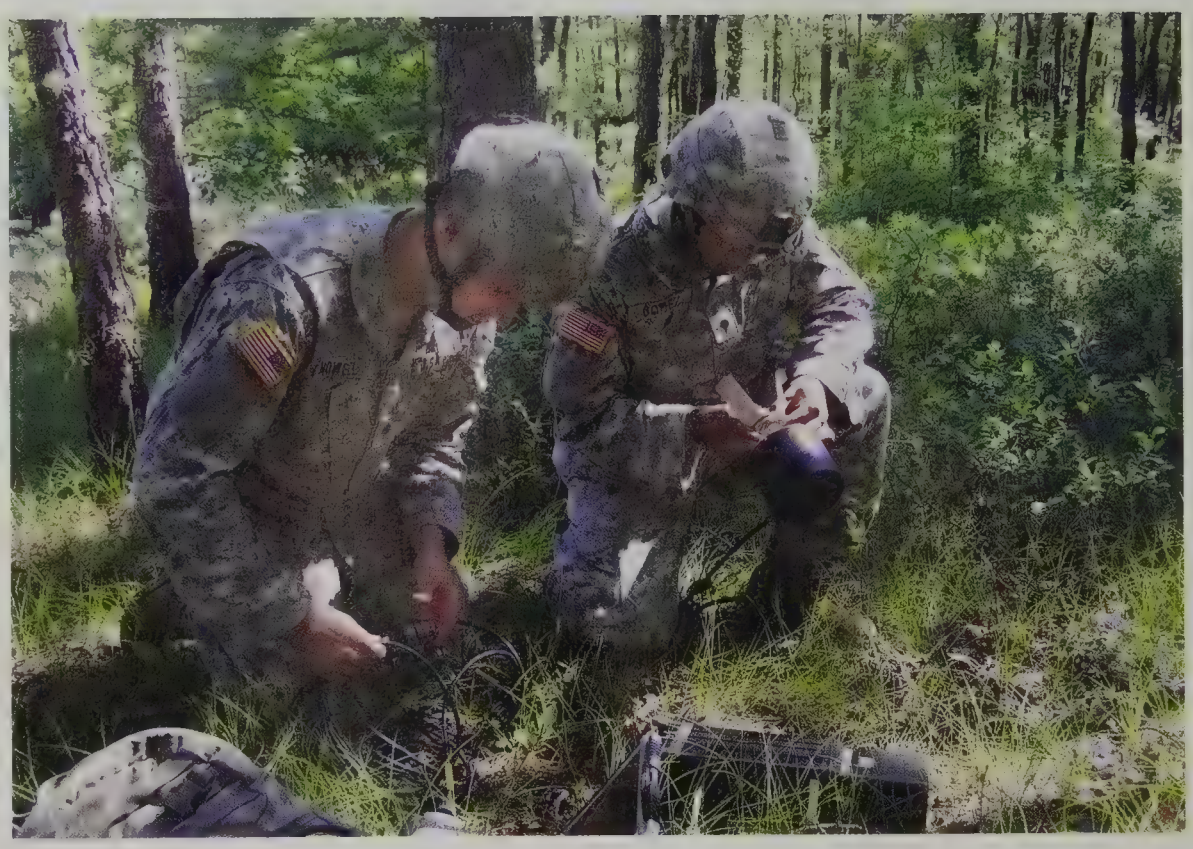
Gray Eagle unmanned aircraft

Raven unmanned aircraft system

ional Humvees and three trailers. The TUAS platoon consists of 22 personnel with the ability to sustain flight operations on a 24-hour basis. The UA takes off from a launcher and lands autonomously in an area slightly longer than a soccer field. Annotated imagery can be transmitted in near-real time to support the commander's missions. The system can be deployed via C-130s. A contractor logistics support team, transported in a mobile maintenance facility within a sheltered Humvee and trailer, supports the system.

The **RQ-11B Raven Small UAS (SUAS)**, manufactured by AeroVironment, is a key reconnaissance and surveillance asset for U.S. combat forces. Raven provides organic company- and platoon-level RSTA. The Raven is a battery-operated, hand-launched, 4.5-pound aircraft fielded throughout the U.S. Army. The systems have been widely deployed with U.S. forces in Operation New Dawn and Operation Enduring Freedom. The Raven system consists of three aircraft, two control stations, modular payloads (high-resolution color day camera and IR night sensors with IR laser illuminator), batteries, RSTA kit and spare parts. The system is rucksack-portable by dismounted soldiers. The Raven uses two rugged cases for storage and transport. The system is interoperable with One System Remote Video Terminal and with receivers in manned aircraft. An FY 2012 upgrade is providing a single fully gimbaled payload incorporating day and night sensors and the IR illuminator.

The **RQ-20A Puma All Environment Capable Variant (AECV) SUAS** is a 13-pound, 9-foot wingspan aircraft supporting forward-deployed U.S. Army brigade combat teams (BCTs). The Puma, manufactured by AeroVironment, employs a fully gimbaled payload carrying a high-resolution color day camera, an IR sensor and an IR laser illuminator. The Puma is hand-launched and provides lower echelon units with an organic RSTA asset capable of up to two hours of endurance and 15-kilometer range. The Puma AECV system includes three aircraft, three payloads, batter-



One System Remote Video Terminal (OSRVT)

ies, two control stations, an RSTA kit, spare parts and rugged transport cases. The Rapid Equipping Force originally procured Puma in response to an urgent requirement. Subsequent requirements led to procurement for route clearance patrols (RCP) and each maneuver company within BCTs supporting OEF. The RCPs and BCTs currently employ Puma with a significant positive impact on operations.

The **One System Remote Video Terminal (OSRVT)**, manufactured by AAI, is an evolutionary acquisition strategy built on the OSRVT Increment I, which was developed and fielded in response to urgent needs as a rapid acquisition program. OSRVT provides commanders and soldiers at all echelons with a tool for gaining and maintaining dominant situational understanding continuously throughout an operation. It enables the user to achieve battlefield visualization and situational understanding through full-motion video and at standoff ranges never before available.

In order to provide this unprecedented visualization, OSRVT collects and processes live video sources in real time. These video streams can be viewed immediately, recorded for quick playback and analysis, or exported to another storage device for extended recording and video archiving, or to another user on the network to enhance situational awareness.

The OSRVT program uses commercial off-the-shelf (COTS) and government off-the-shelf (GOTS) technologies. Specific applications are acquired, integrated onto test models and evaluated, first in a test facility and then in an operational setting. COTS/GOTS technology and a flexible test bed are program approaches to minimize research and development, use proven technologies and field iterative capabilities in the short term.

The **Universal Ground Control Station (UGCS)**, produced by AAI, provides for a common set of hardware and software functionality to support UAS interoperability with Army, joint service and allied forces. The UGCS performs UAS mission planning, unmanned aircraft (UA) launch, mission execution, UA recovery, and post-mission support. A UGCS consists of two S-788 configuration or three S-280 configuration crew stations, with each crew station having the capability of performing all UGCS functions. The UGCS operators will each be able to perform either UA control functions, mission payload functions or both.

In support of the operational and communication functions, the UGCS will perform data processing, including the ground-based portions of guidance, control, navigation functions, and Army Mission Command Network and Systems and will include electric power backup and distribution equipment. An environmental control function will support the crew and equipment inside the UGCS. The UGCS will be capable of operating and interfacing with other unmanned aircraft within the Army UAS family—as well as with other intelligence-gathering and support systems—without causing mutual interference or operational degradation. The GCS subsystem also consists of a shelter and/or portable transit cases and environmental conditioning capability to protect the GCS subsystem's functionality from the physical environment.

Fixed Wing

The Army uses a variety of fixed-wing assets, composed of utility; intelligence, surveillance, reconnaissance (ISR)/special electronic mission aircraft (SEMA); VIP/Special Air Mission; and cargo.

The utility aircraft include the **C-12**, **C-26**, and **UC-35** aircraft.

The **C-12 King Air** serves as the Army's short-range utility aircraft designed to fill air transportation requirements out to 800 nautical miles (NM). The nondevelopmental aircraft platform provides efficient all-weather transport for commanders, staff, and low-volume, high-priority parts and equipment.

The **C-26 Fairchild Metro Liner** aircraft provides a cost-effective carrier for high-volume travel routes. The aircraft has a range of 2,040 NM (with 19 passengers) and can also be used for cargo movement or medical evacuation. The entire C-26 fleet has recently been upgraded with a modernized digital cockpit, terrain avoidance warning system, traffic collision avoidance system, and other upgraded systems to enhance safety and ensure compliance with next-generation requirements.

The **UC-35A Cessna Citation Ultra/UC-35B Encore** is an efficient, medium-range (800 to 1,800 NM), all-weather airplane that transports commanders and staffs so that they can perform command, liaison, administration and inspection duties. This aircraft is also used for the movement of high-priority personnel and cargo. Eight UC-35s are authorized per theater aviation company.

The Army's ISR/SEMA aircraft include the **RC-12**, **ARMS**, **EO-5**, **MARSS**, and future **EMARSS** aircraft.

The **RC-12 Guardrail** configuration carries the Guardrail common sensor system and provides standoff communications intelligence, electronics intelligence, and intercept and location targeting to enhance corps commanders' warfighting capabilities. In addition, the RC-12 provides national-level targeting information. Sixteen RC-12 aircraft were recently converted to an RC-12X modernized cockpit configuration, and a number of these aircraft are in the process of receiving the Improved Guardrail common sensor prime mission equipment.

The **C-12 King Air Airborne Reconnaissance Multi-Sensor System (ARMS)** configuration provides commanders with real-time, low-altitude airborne reconnaissance and imagery analysis. It supported the Army's Task Force ODIN (Observe, Detect, Identify, and Neutralize) in Iraq, which is complete. Aircraft have returned to the continental United States and are currently undergoing a service life extension program (SLEP) and reset.

The **EO-5 Airborne Reconnaissance Low (ARL)** is based on a modified DeHavilland-7 aircraft. The system carries a package that combines both communications intelligence and imagery capability.

C-23 Sherpa

The **Medium Altitude Reconnaissance and Surveillance System (MARSS)** is based on the **King Air 300** aircraft. The sensor package is designed to counter the improvised explosive device (IED) threat chain with the use of onboard imagery and communications intelligence capabilities.

The Army is also developing a new ISR aircraft system known as the **Enhanced Medium Altitude Reconnaissance and Surveillance System (EMARSS)**. This program is currently in the engineering and manufacturing development phase.

The Army's **C-20** and **C-37 Gulfstream Executive Transport Jets** belong to the U.S. Army Priority Air Transport Command (USAPAT). These jets provide global transport, along with secure command-and-control systems, to senior leaders from the Department of Defense and Department of the Army, commanders, and other high-ranking government officials for flights up to 5,000 NM.

The final element of Army Fixed Wing is the Cargo fleet. The **C-23 Sherpa** aircraft provide troop and equipment transport, airdrop, and medical evacuation capabilities. The C-23 serves as the service's short-range cargo aircraft designed to fill air transportation requirements of 30 passengers or 7,280 pounds of cargo. A portion of the fleet is equipped for deployment with the ballistic armor protection system, night-vision-goggle capability, the common missile warning system, Blue Force Tracking, and a microclimate cooling system. In addition, selected C-23 aircraft are receiving the safety avionics modification (SAM), which provides a digital cockpit, terrain avoidance warning system, traffic collision avoidance system, and other modernized systems to enhance safety and ensure compliance with next-generation requirements.

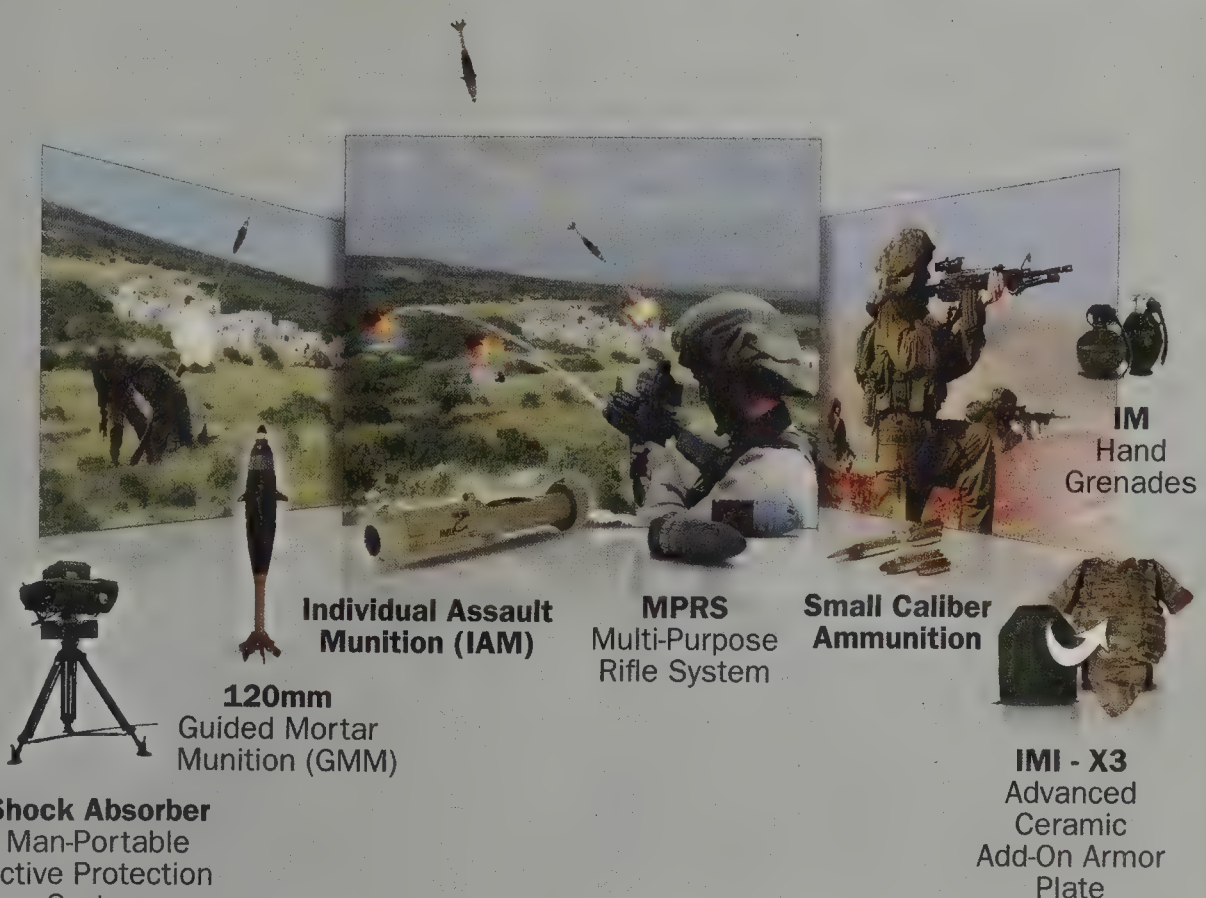
Aviation Systems

Army air traffic services provide Army aviation the assets required to ensure safety and survivability on the modern battlefield. **Tactical Air Traffic Control (ATC)** supports air and land component commanders' automated-airspace command-and-control requirements and ATC for aircraft operating in terminal and rear operation areas. In turn, air traffic services support is critical to fixed-base force projection platforms, a function that mitigates risks to Army aircraft operating from Army airfields worldwide.

To meet these needs, the Office of the Product Manager for Air Traffic Control Systems (PM ATC)—assigned to the Aviation and Missile Command at Redstone Arsenal, Ala.—manages the modernization of the tactical and nontactical ATC equipment.

Major tactical ATC programs include the

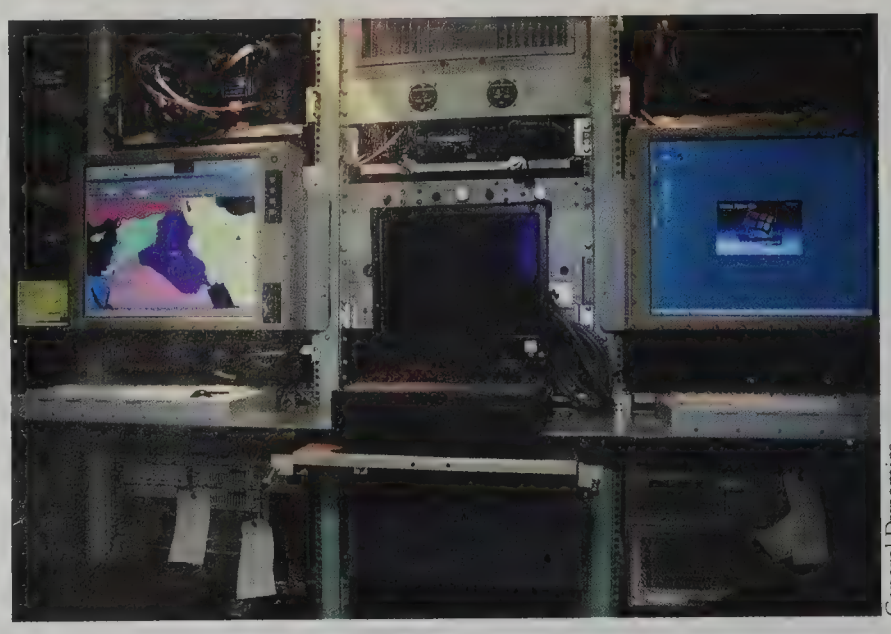
'Overmatching' the infantry squad needs



IMI
Israel Military Industries Ltd.

Tel: (972)3-548-5617/5749
Fax: (972)3-548-5129
E-mail: imimrktg@imi-israel.com
Visit us on the web: www.imi-israel.com

The Impact of Performance



AN/TSQ-221 Tactical Airspace Integration System (TAIS)

General Dynamics

air traffic navigation, integration and control system (ATNAVICS), tactical airspace integration system (TAIS) and the mobile tower system (MOTS).

The **AN/TPN-31 Air Traffic Navigation, Integration, Coordination System (ATNAVICS)** is a Humvee-mounted, survivable radar system that contains a highly mobile tactical area surveillance and precision-approach air traffic control system. It has replaced the technologically obsolete and unsupportable landing control central (AN/TSQ-71B). The system provides expeditious air traffic flow, permitting continuous unimpeded operations, and provides area navigational assistance, integrates air traffic during joint/combined operations and coordinates air movement within selected terminal controlled airspace areas. The ATNAVICS facilitates the safe handling of terminal air traffic in visual flight rules and instrument flight rules conditions, providing precision approach capabilities. All components of the system can be loaded onto a single C-130 aircraft for deployment to any location. In addition, the system can be sling-loaded by a CH-47.

The **AN/TSQ-221 Tactical Airspace Integration System (TAIS)** is a tactically mobile and strategically deployable system incorporating a Humvee prime mover with a standard Army rigid-walled shelter containing the mission equipment and radio suite. The **AN/FSQ-211 TAIS Airspace Workstation (AWS)** is a transportable, small form-fit factor computer running Microsoft Windows, the Microsoft Office suite, and the TAIS mission application. The TAIS software in both variants provides a digitized warfighting application within the Army mission command system (AMCS) system of systems. TAIS and TAIS AWS are utilized in all theaters, across the range of military operations, and compose the U.S. Army's program of record for both airspace command and control (AC2) and tactical en route air traffic services requirements. Either variant can develop Army requests for airspace, deconflict combat airspace and airspace users, and communicate with joint airspace management systems through the theater air ground system (TAGS). This provides a direct connection to the joint force air component commander (JFACC)/airspace control authority (ACA) through the joint theater battle management core system (TBMCS). TAIS and TAIS AWS provide automated AC2 and coordinated use of battlefield airspace for the purpose of supporting force operations, enhancing force projection, and facilitating freedom of maneuver in the airspace, while minimizing fratricide through precise mission-command synchronization and deconfliction capabilities in four dimensions. The AN/TSQ-221 TAIS also supports nonautomated airspace users and aircraft through voice and manual interfaces.

The latest version of TAIS software resident in both the TAIS and TAIS AWS also provides a Web-based, network-centric, thin client application—the dynamic airspace collaboration tool (DACT)—that provides AC2 collaboration and 3-D visualization capability for non-TAIS users via a Java web applet. This extends key elements of TAIS functionality to other Army users, joint, and coalition partners on shared mission networks without the need for these other users to have a TAIS AWS. The DACT allows all airspace stakeholders to rapidly and accurately collaborate on airspace requests in real time. For example, an Army brigade combat team can use its TAIS AWS to collaborate with a U.S. Marine Corps airspace agency and a U.S. Air Force airspace agency using the DACT to expedite dynamic retasking of assets across service boundaries.

TAIS is evolving as part of the Army's common operating environment (COE), an approved set of computing technologies and standards that enable secure and interoperable applications to be developed and executed across a variety of computing environments. TAIS DACT and AC2 capabilities reside in the command post computing environment of COE. New functionality will include Web applications, or widgets, for the DACT and AC2 services that can reside on a server stack such as the mission command server. This capability will enable the continuous ability to access, manipulate, manage and share airspace information across the operational environment without the need for unique hardware dedicated to this role.

The **AN/MSQ-135 Mobile Tower System (MOTS)** is a mobile air traffic control (ATC) tower designed to quickly establish air traffic services during the initial phases of deployment and sustain those services throughout operations and redeployment. It will provide terminal ATC services for selected high-traffic landing areas in the echelon above corps, corps, and division areas. It will replace existing AN/TSQ-70A and AN/TSW-7A. The MOTS will also be self-deployable or airlifted by C-17 aircraft or CH-47 helicopters.

The MOTS uses three vehicles with trailers. The prime mover, an up-armored M1083A1P2 medium tactical vehicle (MTV) cargo truck, will transport the MOTS shelter and serve as the shelter's platform. It will also tow the generators required to provide organic power to the MOTS. Two M1165 Humvees will tow the MOTS organic airfield lighting system (ALS), which includes the ALS cables and generator. The ALS light internal batteries can be powered via solar or generator power, although use of generator power requires the cables to be connected to the lights. The prime mover and secondary vehicles will be deployed with the MOTS, and none will be modified for integration as part of the MOTS.

MOTS will provide numerous services including sequencing and separating arriving and departing aircraft, coordinating instrument meteorological condition recovery of aircraft, coordinating in-flight emergencies, and search and rescue (including combat missions).

In peacetime, the MOTS will support Army air traffic services training requirements and aviation units during tactical field training exercises, along with supporting other agencies, host nations, joint services and other Army missions. The tactical ATC systems are derivatives of commercial off-the-shelf technologies or derivatives of other military systems. By using this approach, the PM ATC has maximized the effectiveness and efficiency of funding allocated to the air traffic equipment inventory modernization.

The **AN/TSQ-198 Tactical Terminal Control System (TTCS)** is a rapid-deployable tactical air traffic control communication system that provides enhanced air traffic services communications support to aviation assets conducting reconnaissance, maneuver, medical evacuation, logistics, and intelligence operations across the battlefield. Capability consists of an M998 Humvee and M1101 trailer with the

following communications capabilities: PRC-117F, VRC-103 times 2, VRC-91 SINCGARS, ARC-220 HF, and DAGR/PLGR.

Fixed-Base Programs

The major fixed-base ATC programs include the National Airspace System (NAS) modernization programs: the digital airspace surveillance radar, the DoD advanced automation system, the voice communications switching system and the fixed-base precision approach radar.

The **Digital Airspace Surveillance Radar (DASR)**, or AN/GPN-30, is a new terminal air traffic control (ATC) radar system that replaces current analog systems with new digital technology. DASR will replace the Army's AN/FPN-66A on a one-for-one basis, and it is also being considered for use at other locations where airport surveillance radar capability will be lost when the AN/FPN-40s are decommissioned. These older radars, some as old as 20 years, are being replaced to improve reliability, provide additional weather data, reduce maintenance cost, improve performance and provide digital data to new digital automation systems for presentation on air traffic controller displays.

Also under the DoD NAS procurement effort is the **DoD Digital Advanced Automation System (DAAS) Preplanned Product Improvement**. AN/FSQ-204 DAAS is DoD's version of the FAA's standard terminal automation replacement system (STARS). DAAS/STARS replaces the automated radar terminal system and other capacity-constrained, older terminal automation systems in approach control facilities and associated towers. Controllers providing ATC services to aircraft in the terminal areas will use DAAS. Typical terminal ATC services include separating and sequencing air traffic, disseminating traffic alerts and weather advisories, and radar vectoring arriving and departing air traffic. Product Manager for Air Traffic Control plans to retrofit the currently fielded DAAS with new processors and data communications equipment that will enable Army ATC to participate in the FAA's next-generation ATC efforts.

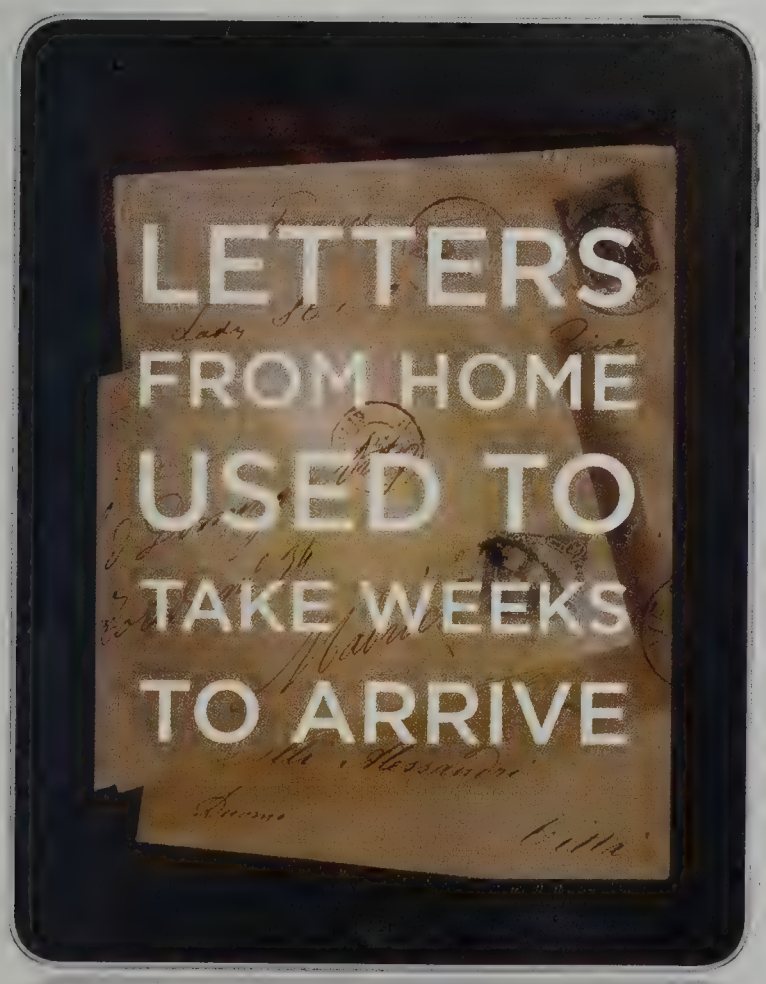
The Radio Replacement program consists of more than 3,000 CM-300 radios that comply with new frequency spectrum requirements in Europe and the United States. These radios will be installed at Army airfields to replace aging analog radios.

The **Army Airfield Automation Systems (AAAS)** is another DoD NAS procurement effort to incorporate weather information and other ATC information into Army ATC facilities. This program also upgrades existing ATIS capabilities and consolidates numerous airfield information terminals into a single display monitor.

The Army **AN/FPN-67 Fixed-Base Precision Approach Radar (FBPAR) System** provides capabilities for air traffic separation, final approach course monitoring, precision approach guidance, and instrument meteorological conditions recovery operations for aircraft operating in Army-controlled airspace and/or at Army terminal airfields. The FBPAR has replaced the AN/FPN-40 fixed-base radar being used by fixed-base ATC facilities worldwide. This radar is a modification of the precision-approach radar portion of the ATNAVICS (AN/TPN-31) tactical radar system. Once installed, FBPAR will become a permanent component of nontactical Army airfields throughout the world. For the past several years, PM ATC has made significant contributions toward the modernization of Army air traffic control systems and equipment. Nevertheless, there continues to be a significant amount of aging air traffic services and ATC equipment in the inventory.

Aviation Networks and Mission Planning

The **Product Director for Aviation Networks and Mission Planning (PD ANMP)** provides the Army aviation community with state-of-the-art interoperability and mission planning tools that enhance aviators' situational awareness, command and control, and safety. These products are de-



TECHNOLOGY CHANGES
EVERYTHING.™
IT TRANSFORMED THE WAY YOU DEPLOY OVERSEAS. THE WAY YOU TALK TO YOUR LOVED ONES. HEAR NEWS FROM HOME. EVERY DAY, INNOVATIONS CONNECT PEOPLE ACROSS SPACE AND TIME.
WHAT IF TECHNOLOGY CONNECTED YOU TO A COLLEGE DEGREE?
IT'S POSSIBLE. YOU HAVE THE TECHNOLOGY TO **BELONG TO A WORLDWIDE LEARNING COMMUNITY.** THAT COMMUNITY IS ASHFORD UNIVERSITY.

Ashford UNIVERSITY

MILITARY.ASHFORD.EDU/AUSA
888.243.1059

veloped, deployed, sustained, and refreshed to keep current with changing technologies and advances in hardware and software to ensure mission success.

The **Improved Data Modem (IDM)** is the common solution for digitizing Army Aviation. The IDM performs as an Internet controller and gateway to the tactical Internet and fire support Internet for aviation platforms. The IDM remains a dynamically evolving product to facilitate a digital transmission network for the sharing of situational awareness, sensor, and tactical data among our digitized Army, joint, and coalition aviation partners. The IDM serves as the crucial interface between platform mission computers and radios, supporting legacy very high frequency (VHF) and ultra high frequency (UHF) radios and Blue Force Tracker, with efforts under way to enable future compatibility with Blue Force Tracker 2. As a single line-replaceable unit (LRU) that performs communication modulation/demodulation, database processing, and message processing functions for digitized Army Aviation, the IDM presents a multipath approach to command and control in the tactical environment.

The **Aviation Mission Planning System (AMPS)** is a mission-planning and battle-synchronization tool that automates aviation mission planning tasks, including tactical command and control, rehearsal, and flight planning. Interoperable with Army mission command systems (AMCS) and associated networks, AMPS furnishes the aviation commander with continuous situational awareness, allowing for rapid adjustment and dissemination of mission plans. AMPS products enable communication, navigation, pilot situational awareness, and weapons systems on Army aircraft including the AH-64A/D, CH-47D/F, OH-58D, UH-60A/L/M/Q, HH-60L/M, and unmanned aircraft systems.

AMPS hosts portable flight planning software (PFPS), which allows the warfighter to consolidate and load his aircraft with navigation, environmental, performance, and threat data. A significantly updated version of PFPS, newly named Execution Planner (X-Plan), is in the final stages of development and expected to be released in FY 2014. A joint developmental effort between PEO Aviation, Special Operations Command and the U.S. Air Force A2U, X-Plan provides enhanced capabilities, improved workflow and integration, and a Microsoft Office 10 look and feel.

The **Centralized Aviation Flight Records System (CAFRS)** provides management of aviation flight records through a centralized, fully automated, globally accessible and secure system. CAFRS provides commanders easy access to essential aviation information for training assessments and risk management while records are stored in a safe and secure digital environment. In addition, senior leadership can access aviation flight records to assist in resource, readiness, and personnel management decisions.

Composed of three tiers, CAFRS provides seamless and redundant flight records storage. The first tier, called the CAFRS enterprise server, stores and consolidates all Army aviation personnel, flight, and training record data provided through the lower tiers. CAFRS data collection points (CDCPs) make up the second tier and operate as CAFRS clients to support aviation flight and training records management. CDCPs also perform the critical task of synchronizing data with the central database. The third and lowest tier of the CAFRS system, known as the CAFRS client, operates mostly at platoon, company, and battalion levels or any level at which Army aviation personnel and their flight record data need to be managed.

Unit Maintenance Aerial Recovery Kit (UMARK)

Aviation Ground Support Equipment

The Aviation Ground Support Equipment (AGSE) Product Management Office (PMO) is the life-cycle manager for all common AGSE used within Army Aviation. This AGSE enables our soldiers to conduct aviation maintenance in the field and improve aviation readiness. The AGSE PMO team is involved in every step of the life-cycle process including development and fielding of new equipment, the modernization of legacy equipment, and the reset and repair of equipment from units returning from Operation New Dawn and Operation Enduring Freedom. We remain in constant communication with our users, ensuring our equipment meets their requirements.

The AGSE portfolio included more than 15 acquisition category (ACAT) III programs, consisting of 55 line item numbers and more than 33,000 separate components used to support every level of aviation maintenance, from the crew chief at the flight company to depot-level repairs conducted by the Aviation classification repair activity depot (AVCRAD). Its mission is to provide AGSE, which enables and improves operational readiness, and its goal is to provide the right tools at the right time in the right place to support soldiers.

The **Generic Aircraft Nitrogen Generator (GANG)** is a diesel-powered, wheel-mounted, towable, easily liftable, self-generating, nitrogen-servicing cart capable of producing nitrogen in forward-deployed areas where commercial sources of nitrogen are not available. The GANG produces 95.5 percent nitrogen to service/adjust aircraft accumulators, main rotor blades, landing gear struts and tires for all Army Aviation rotary-wing aircraft platforms. The GANG refills nitrogen bottles for nitrogen service carts and nitrogen backpacks used at all levels of Army aviation maintenance.

The **Standard Aircraft Towing System (SATS) with Crew Protection System (CPS)** is a commercial off-the-shelf aviation towing vehicle that can position all current and projected future Army aircraft and AGSE. The SATS replaces current nonstandard towing vehicles used by aviation maintenance units worldwide. The SATS has a minimum draw bar pull (DBP) of 8,000 pounds and is designed for towing and pushing all Army aircraft and AGSE. It provides seating for two people and carries a standard aircraft tow bar, a set of ground handling wheels, and tool kits. The crew protection system provides soldiers with protection from the elements by incorporating a hard-shelled cab with sliding windows on the doors, windshield wipers/washer, heater, dome light, and an adjustable fan.

The **Unit Maintenance Aerial Recovery Kit (UMARK)** provides the aviation support company and the aviation maintenance company with the ability to quickly rig disabled/nonflyable aircraft for evacuation. The design is a lightweight, manportable system that can be deployed by a three-person crew. It's capable of supporting recovery operations in all climatic conditions and geographical areas in which recovery aircraft can safely operate. Recovery can be achieved using a UH-60, CH-47 or other services aircraft, such as the CH-53 or CH-46 aircraft.

The **Battle Damage Assessment and Repair (BDAR)** system is a transportable and expeditious means to assess combat damage, defer repair, or repair Army helicopters in a battlefield environment. The BDAR system provides a capability for temporary or permanent repairs to combat damaged helicopters. Quick-fix materials and equipment include repair kits for the electrical systems, fuel cells, and fluid lines to increase helicopter availability under combat conditions.

The **Aviation Intermediate Maintenance Shop Set (AVIM SS) Modernized** complex is composed of 10 Class 7 specialized shop sets in new or refurbished one-sided expandable (OSE) International Standardization Organization (ISO) 20-foot shelters. The complex provides an easily transportable and modular maintenance capability in the aviation support companies. The modernization effort adds improved aerospace standard tools that allow units to provide logistical and maintenance support operations across the full spectrum of military operations and Army Aviation platforms. Especially noteworthy is the composite shop set modernization effort: The composite shop set added specialized tools including hot-bonders and heat blankets for elevated temperature cures, thermocouples, thermocouple welder, vacuum tools, downdraft table, and carbon fiber and fiberglass repair materiel to make composite material repairs.

The Aviation **Shop Equipment Contact Maintenance (SECM) Vehicle** (M1079A2 Plan) provides a contact maintenance capability on the battlefield for expeditious platform assessment and repair of Army rotary-wing aircraft to return aviation equipment to an operational condition. To accomplish its mission, the SECM is a self-contained system. The SECM has its own primary mover, an M1079A1P2 (armor ready), which includes a weather-resistant van, a self-contained tool and equipment storage/rack system, and electrical power to operate hand tools and facilitate aviation maintenance operations. The SECM is allocated space, shelving, and electrical power for task organizing aviation ground support tool sets, repair parts, and other supplies to meet this mission need. This system is mission configurable to allow aviation maintenance units to develop a load plan and transport equipment and toolboxes specific to each mission need. This system provides a mobile maintenance/repair capability within the aviation support company and the aviation maintenance company.

The **Aviation Vibration Analyzer (AVA)** provides a rugged, portable, and safe means of performing helicopter one-per-revolution maintenance for both main and tail rotors. Proper rotor track and balance are critical to the health and functionality of an aircraft. The AVA measures, records, and processes vibration and blade-position information to present measurement, diagnostic, and corrective information to maintenance personnel to correct faults and expedite the track and balance process.

The **Aviation Ground Power Unit (AGPU)** E Model build to assemble (BTA) program is a gas-turbine-engine-driven, wheel-mounted, self-propelled, enclosed unit that provides 90 kilovolt-Ampere AC; 350 amps DC; 3,000 pounds per square inch hydraulic pressure; and 15.2 good manufacturing process flow and 40 pounds per square inch gauge pneumatic pressure at 450 degrees Fahrenheit. The AGPU can provide simultaneous outputs in support of aircraft maintenance, preventing the need to operate onboard aircraft engines or auxiliary power units. The AGPU supports all

Testing completed for the Aviation Ground Power Unit (AGPU) build to assemble at Letterkenny (Pa.) Army Depot.

Army rotary-wing aircraft in forward-deployed areas where commercial sources of electrical, hydraulic, pneumatic air power are not available.

The **Pitot Static Test Set (PSTS)** is a lightweight, manportable tester that provides the capability to troubleshoot, repair and verify proper operations of flight-critical aircraft air data systems. Air data system operational accuracy is determined by applying leak checks on barometric pressure gauges. The PSTS has self-test capabilities with failsafe protection of instruments under test displayed through a digital readout. The PSTS requires calibration and is supported by the U.S. Army Test, Measurement, and Diagnostic Equipment (TMDE) support activity.

The **Flexible Engine Diagnostic System (FEDS)** is a turboshaft engine test stand that uses automated data acquisition/instrumentation and air dynamometer technology to test and verify flight readiness of engines. FEDS supports CH-47, AH-64, UH-60, OH-58 and UH-1 aircraft.

The **Swaging Tool Kit** provides aviation technicians with a fast and reliable method for joining aircraft tubing and repairing high-pressure fluid, fuel, and hydraulic lines. The system includes a power unit, head assembly, hydraulic pressure source and accessories to cut, deburr, and mark the tube head and inspect the completed swaged connection.

The **Non-Destructive Test Equipment (NDTE)** provides Army aviation maintenance units with electronic test instruments to inspect aircraft components and structures for defects, corrosion, or foreign objects without complete disassembly or removal from the aircraft. The ultrasonic tester provides scanned images for several methods of evaluations using pulsed ultrasonics to detect both surface and subsurface defects. The eddy current tester uses electrical current to detect cracks or material flaws on ferrous and nonferrous metals. The harmonic bond tester detects delaminations and voids on composite materials. The X-ray machine is used to inspect internal components of an air frame, engine, control tubes and main spars.

The **Aviation Unit Maintenance (AVUM) Number 2 Shop Set (A92) Modernization Program** is composed of three individual Airmobile S280 shelters that provide a covered environment with electrical power capability for lights, tools, heat and cooling. The modernization effort adds improved aerospace standard tools that allow aviation maintenance companies to provide logistical and maintenance support operations across the full spectrum of military operations and Army aviation platforms.

The **Aviation Foot Locker** supplements the aviation maintainer's individual tool kits and includes aerospace standard tools. The tools are contained in a two-man-liftable durable outer shell that has a quick inventory capability and provides the commander with a tool management capability. The tooling consists of torque wrenches, spring scales, files, calipers, a portable drill and assorted measuring equipment.

B1 and **B4 Maintenance Platforms** are aviation maintenance stands, which provide a stable, elevated working platform for Army rotorcraft maintenance activities and enhance the occupational safety environment for maintainers.

The **Digital Aircraft Weighing Scale (DAWS)** provides the capability to perform weight and balance for Army aircraft during scheduled and unscheduled maintenance. The system includes ramps, ramp extensions, low-profile 10,000-pound scales with digital readouts, a battery charger, and an accessory leveling kit that enables the user to perform weight and balancing operations without having to undertake jacking operations. The DAWS is a significant safety enhancement and reduces maintenance time.

Aviation Mission Equipment—Communications, Navigation and Surveillance

All Army aircraft require communications, navigation and surveillance (CNS) equipment in order to effectively and safely operate in both civil and military airspace. The Product Manager for Aviation Mission Equipment (PM AME) is responsible for providing the common CNS equipment that meets the full range of Army aviation requirements, from FAA and International Civil Aviation Organization (ICAO) mandates required to fly in commercial airspace to tactical, secure CNS capabilities that enable Army aviation to be effective in combat operations.

Current PM AME products include the AN/ARC-231 and AN/ARC-220 radio communications systems, the AN/ASN-128D and embedded global positioning system (GPS) inertial (EGI) navigation systems, and the AN/APX-118 and AN/APX-123 transponder surveillance systems. PM AME also has the responsibility for integrating joint tactical radio systems (JTRS) into all aviation manned and unmanned platforms.

Communication Systems

The **AN/ARC-231 Radio System** provides multiband, multimode, secure anti-jam voice and satellite communications capability, enabling long-range and beyond-line-of-sight communications in extreme terrain conditions. It replaces legacy ARC-164 and ARC-186 radios. The ARC-231 also satisfies a global air traffic management requirement for voice radios to operate at 8.33 kiloHertz (kHz) channel spacing, driven by VHF-AM frequency congestion in Europe. Efforts are under way to integrate the next-generation military satellite communications system (the mobile user objective system capability) into the radio.

The **AN/ARC-220 High Frequency (HF) radio** and its AN/VRC-100 ground counterpart provide non-line-of-sight (NLOS) communications for Army aircraft and are currently installed on the majority of aviation rotary-wing platforms. It provides communications while operating at nap-of-the-Earth (NOE) altitudes and at ranges beyond the tactical UHF and VHF radios. The AN/ARC-220 HF is the only aviation

alternative for NLOS operations if satellite communication is compromised or lost.

The **AN/ARC-201D Tactical Airborne Radio** subsystem provides secure, anti-jam voice and data communications. Single-channel ground and airborne radio system (SINCGARS) uses 25 kHz channels in the VHF FM band, from 30 to 88 MHz. It has single-frequency and frequency-hopping modes.

The **Joint Tactical Radio System (JTRS)** integration program installs and qualifies JTRS radios into both manned and unmanned platforms. Efforts are under way to integrate the AN/ZRC-2() AMF two-channel radio being developed by Program Manager Airborne Maritime and Fixed Radio Systems (PM AMF) into the Apache Block 3, Black Hawk, and Chinook aircraft. The Apache aircraft will be integrated with the Link 16 tactical data link, wideband networking waveform (WNW), and soldier radio waveform (SRW), while the Black Hawk and Chinook aircraft will be integrated with only WNW and SRW. In addition, the Shadow unmanned aircraft system is being integrated with a small form-factor B (SFF-B) radio set being developed by Program Manager Handheld, Manpack and Small Form Factor (PM HMS).

Navigation Systems

The **AN/ASN-128D Doppler Global Positioning System (GPS) Navigation System (DGNS)** provides a combined GPS and Doppler navigation capability and protects the GPS signal through the selective availability anti-spoofing module. The AN/ASN-128D is Instrument Flight Rules (IFR) compliant and is certified for use of GPS as a supplementary means of navigation for en route, terminal, and nonprecision approaches. PM AME is working on an upgrade to the AN/ASN-128D to obtain certification for the use of GPS as a primary means of navigation.

The **Embedded GPS Inertial (EGI) Navigation System** is an Air Force-led, tri-service program that provides an integrated navigation solution for aircraft equipped with a MIL-STD 1553 digital data bus. The EGI provides precise location to the aircraft fire-control computer or integrated system processor for processing targeting information/sensor prepointing. The EGI is currently being upgraded for increased security and civil airspace compatibility including IFR flight en route through nonprecision approach.

The **Joint Precision Approach Landing System (JPALS)** is based on differential GPS technology to achieve civil and military landing system interoperability for precision approach. JPALS sea-based and ground-based systems and Army avionics systems are under development to provide Category I (200-foot decision height and half-mile visibility) precision approach capability.

Surveillance

The **Common Transponder (CXP)** Program is a family of transponders that includes the AN/APX-118 and AN/APX-123 transponders, incorporating the advanced features required in today's global military and civil air traffic environments.

The **APX-118 Identification Friend or Foe (IFF) Transponder** provides commercial modes 1, 2, 3A/C, military mode 4, and mode S. The incorporation of mode S supports the GATM requirement for flight in European airspace. It has embedded communication security, eliminating the need for the external KIT-1C crypto device.

The **APX-123 Next-Generation Army Aviation Transponder** performs all the modes of the APX-118 and adds the new mode 5 IFF capability. It has improved encryption, NSA antitamper provisions, M5L2 squitter capability; it enables identification of closely spaced aircraft; and it's designed for noninterference with civilian ATC. Efforts are also under way to upgrade the APX-123 to meet the FAA mandated automated dependent surveillance broadcast capability, which provides a cooperative position, direction and velocity report for airspace managers.

YOUR SOLUTION FOR READINESS

THE 120K FROM BLUE OX®

- Automatic locking legs easily extend and retract to stay in the towing position
- One person hookup – for quick ease of deployment
- Wide hook-up zone for room to move – 57-1/2"
- Less exposure for war fighter
- Installs in less than two minutes
- Weight reduced by 50%
- No assembly required
- No tools required

Strong As An Ox™

One Mill Road • POB 430
Pender, NE 68047
800-228-9289 • www.blueox.com
ellenkietzmann@blueox.com
jayhesse@blueox.com

MISSILES AND SPACE PROGRAMS

The PEO Missiles and Space provides centralized management for all Army air and missile defense and tactical missile programs as well as selected Army space programs. The PEO is responsible for the full life-cycle management of assigned programs.

The PEO Missiles and Space reports to the Army Acquisition Executive and is aligned with the Aviation and Missile Life Cycle Management Command at Redstone Arsenal, Ala. This materiel enterprise relationship enhances the PEO's ability to provide the world's finest support to our Army, joint service, interagency, and coalition warfighters and customers while continuing the Army's modernization.

The portfolio of programs assigned to the PEO Missiles and Space spans the full spectrum of the acquisition process from system development to acquisition, testing, production, product improvement, fielding, sustainment and eventual retirement from the force. A number of programs are joint programs being developed with the other services. Two programs within the PEO are international cooperative development programs, with other countries sharing in the development as full partners.

In addition to specific acquisition programs, the PEO is applying a system-of-systems acquisition approach to meet warfighters' needs and obtain the desired capabilities of the Army Air and Missile Defense (AMD) Future Force. This approach requires the systems to be restructured into components of sensors, launchers, missiles, and Battle Management Command, Control, Communications, Computers and Intelligence (BMC^4I), utilizing a standard set of interfaces and networks to communicate. The Army's Integrated Air and Missile Defense (IAMD) acquisition approach will ensure that the materiel solutions for the Army's AMD Future Force will provide the capabilities required by the warfighter.

Joint Attack Munition Systems (JAMS)

The Joint Attack Munition Systems (JAMS) Project Office manages all Army aviation rockets and missiles. The current programs include the 2.75-inch Hydra 70 family of rockets, the Hellfire family of missiles and the Joint Air-to-Ground Missile (JAGM).

The **2.75-inch (70 mm) Hydra 70 Rocket Family** encompasses variants of the free-flight rocket that has become the standard ground-attack rocket. The design includes multiple warheads that can be used on the rocket motor.

Rockets equipped with various fuzes and warhead options include: M261 tactical, M267 practice, M151 (10-pound) antipersonnel or canopy/soft bunker, M229 antipersonnel (17-pound), M274 smoke signature, M257 illumination, M264 smoke, M255A1 flechette, and M278 infrared illuminating.

The **AGM-114 Hellfire Missile Family** includes the Hellfire II and Longbow Hellfire missiles. **Hellfire II** is a precision-strike, semi-active laser (SAL)-guided missile and is the principal air-to-ground weapon for the Army AH-64 Apache, the U.S. Marine Corps AH-1W Super Cobra and the U.S. Air Force Predator unmanned aircraft system (UAS).

The SAL Hellfire II guides using laser energy reflected off the target. It has three warhead variants: a dual warhead, shaped-charge high-explosive antitank (HEAT) for armored threats (AGM-114K); a blast-fragmentation warhead (BFWH) for urban, patrol boat and other "soft" targets (AGM-114M); and a metal augmented charge (MAC) warhead (AGM-114N) for urban structures, bunkers, radar and communications installations, and bridges.

In 2012, a multipurpose missile (AGM-114R) began delivery, which allows the pilot to select warhead effects corresponding to the target. UAS or rotary-wing platforms can deliver the AGM-114R.

The Longbow Hellfire (AGM-114L) is also a precision-strike missile, but uses millimeter wave (MMW) radar guidance instead of Hellfire II's SAL. It is the principal antitank system for the AH-64D Apache Longbow and uses the same antiarmor warhead as Hellfire II. The MMW seeker provides beyond-line-of-sight fire-and-forget capability as well as the ability to operate in adverse weather and battlefield obscurants.

During Operation Desert Storm, the Hellfire earned a reputation for being one of the military's most formidable tank killers. Its multimission capabilities were successfully demonstrated in combat against a wide variety of targets, including radar installations, communications posts, bunkers, buildings, antiaircraft emplacements, oil rigs and bridges. Hellfire missiles were used extensively in Operation Iraqi Freedom (OIF) and are in continued use in Operation Enduring Freedom (OEF). The Longbow Hellfire missile was used successfully in combat for the first time during OIF.

The **Joint Air-to-Ground Missile (JAGM)** program will provide a rotary-wing, fixed-wing and unmanned aerial vehicle (UAV)-launched missile system that provides line-of-sight capabilities, including precision point targeting (both active and passive) and fire-and-forget seeker technologies; increased range; and increased lethality against soft and hardened moving and stationary targets. When fielded, the JAGM will replace aviation-launched TOW, the Hellfire family of missiles and the Navy's Maverick family of missiles. The JAGM will increase the warfighter's operational flexibility by effectively engaging a variety of stationary and mobile targets on the battlefield, including advanced heavy/light armored vehicles, bunkers, buildings, patrol craft, command-and-control vehicles, transporter/erector launchers, artillery systems and radar/air defense systems. Its multimode seeker will provide robust capability in adverse weather, day or night, and in an obscured/countermeasure environment, against both stationary and moving targets.

A Hellfire Missile is loaded onto an AH-64D Apache helicopter.

Cruise Missile Defense Systems (CMDS)

The CMDS Project Office is equipping the transformation of the current force maneuver air and missile defense capability into an integrated air and missile defense capability.

Programs include **Stinger-based Avenger and Manportable Air Defense System**

MANPADS), the Sentinel radar and the Joint Land Attack Cruise Missile Defense Elevated Netted Sensor System (JLENS).

Stinger-based Avenger and MANPADS provide the only air defense weapon currently in the forward area through Stinger, a fire-and-forget infrared/ultraviolet (IR/UV) missile system. Stinger-based Avenger is highly mobile and provides shoot-on-the-move capabilities in day, night, and adverse weather operations, and is designed to counter hostile, low-flying unmanned aerial vehicles (UAVs), cruise missiles, rotary-wing aircraft and high-performance fixed-wing aircraft.

Stinger provides low-altitude defense for ground forces against aerial observation or attack by smaller threat aircraft. Stinger missiles have extensive counter-counter-measure capabilities, can engage targets from any aspect including head-on, and utilize a high-explosive, hit-to-kill warhead.

The **AN/MPQ-64 Sentinel** is an advanced, three dimensional, battlefield X-band air defense phased-array radar with an acquisition range of 40 kilometers. Sentinel transmits its radar imagery to the forward area air defense command and control (FAAD C^2) via radio frequency link. Sentinel is being upgraded to the improved Sentinel configuration that doubles its range and will integrate with future MD BMC^4I via SLAMRAAM.

Stinger-based Avenger mounted on a Humvee

The **Joint Land Attack Cruise Missile Defense Elevated Netted Sensor System (JLENS)** uses advanced sensor and networking technologies to provide 360-degree, wide-area surveillance and precision tracking of land attack cruise missiles. JLENS detects stressing, terrain-masked cruise missiles and other air-breathing threats, permitting extended engagement ranges for current air defense systems.

Lower Tier Project Office

The Lower Tier Project Office consists of the Patriot, PAC-3 and Joint Tactical Ground Station (JTAGS).

The **Patriot Missile System** provides defense of critical assets and maneuver forces belonging to corps and to echelons above corps against aircraft, cruise missiles and tactical ballistic missiles (TBMs). The PAC-2 system upgrade, modified PAC-2 guidance

enhancement missiles (GEM) and the PAC-3 missile provide the Patriot missile system with an advanced antitactical missile capability. The combat element of the Patriot missile system is the fire unit, which consists of a phased-array radar set (RS), an engagement control station (ECS), an electric power plant, an antenna mast group, a communications relay group and up to eight remotely located launching stations (LSs).

The RS provides all tactical functions of airspace surveillance, target detection and tracking, and missile guidance and engagement support. The ECS provides the human interface for command and control of operations. Each LS contains four ready-to-fire missiles sealed in canisters that serve as both shipping containers and launch tubes. The Patriot's fast-reaction capability, high firepower and ability to track numerous targets simultaneously and operate in a severe electronic countermeasures environment are significant improvements over previous air defense systems.

The **Patriot Advanced Capability-3 (PAC-3)** missile program incorporates significant upgrades to the RS and ECS and the battle-proven PAC-3 missile, which uses hit-to-kill technology for greater lethality against TBMs armed with weapons of mass destruction. The PAC-3 missile is the first operationally deployed hit-to-kill weapon system capable of defeating all known air and missile defense threats. In addition, it is possible to have up to 16 PAC-3 missiles per launcher, thereby increasing firepower and missile defense capabilities. The PAC-3 missile's primary mission is to kill maneuvering and nonmaneuvering TBMs while remaining able to counter advanced cruise missiles and aircraft. The PAC-3 missile upgrade program adds system improvements to increase performance against an evolving threat, meets user needs and enhances joint interoperability.

The **Joint Tactical Ground Station (JTAGS)** is a transportable information processing system that supports combatant commanders and forward-deployed forces with early warning data on ballistic missile launches.

The Missile Defense Agency-managed **Terminal High Altitude Area Defense (THAAD)** system, a critical element of the ballistic missile defense system (BMDS), will provide rapidly deployable ground-based missile defense components that deepen, extend and complement the BMDS to any combatant commander to defeat ballistic missiles of all types and ranges while in all phases of flight.

THAAD's combination of high-altitude, long-range capability and hit-to-kill lethality enables it to negate the effects of weapons of mass destruction at intercept ranges well beyond the defended area. These attributes, along with THAAD's unique endo- and exo-atmospheric capability, enlarge the battlespace to allow multiple intercept opportunities in both the late-midcourse and terminal phases of ballistic missile trajectories. THAAD can accept cues from Aegis, satellites and other external sensors to further extend the battlespace and defended area coverage. THAAD will operate in concert with the lower-tier Patriot/PAC-3 missile system to provide increased levels of effectiveness.

THAAD is a rapid-response weapon system that can be deployed quickly to protect critical assets worldwide. The THAAD element consists of five major components: missiles; launchers; radars; command, control, battle management and communications (C^2BMC); and THAAD-specific support equipment. All components were successfully integrated, tested and demonstrated during the first program phase that concluded in 2000.

The THAAD development program flight testing resumed in 2005 with the first 15 flight tests. In May 2006, Lockheed Martin and the U.S. Missile Defense Agency successfully conducted the first developmental flight test to engage the entire THAAD weapon system, including THAAD interceptor, launcher, radar and fire-control system. Following repeated flight test successes, the U.S. Army "stood up" the first of four planned THAAD firing batteries at Fort Bliss, Texas, in mid-2008.

Lockheed Martin

Patriot Advanced Capability-3 (PAC-3) missile

Close Combat Weapon Systems (CCWS)

The Close Combat Weapon Systems (CCWS) Project Office manages a range of antiarmor missile and target acquisition systems. Current programs include the tube-launched, optically tracked, wire-guided (TOW 2)/TOW 2A/TOW 2B, Javelin, improved target acquisition system (ITAS) and Improved Bradley Acquisition System (IBAS). The office is also coordinating preliminary work on future TOW missile improvements.

The **BGM-71 Tube-launched, Optically Tracked, Wire-guided (TOW) Missile System**, with the multimission TOW 2A, TOW 2B, TOW 2B Aero and TOW bunker buster missile, is a long-range, multimission, precision-attack weapon system used throughout the world today. TOW is in service in more than 40 international armed forces and integrated on more than 15,000 ground, vehicle and helicopter platforms worldwide. TOW is also the preferred heavy assault weapon system for NATO, coalition, United Nations and peacekeeping operations worldwide. The TOW 2A, TOW 2B, TOW 2B Aero and TOW bunker buster missiles can be fired from all TOW launchers, including the improved target acquisition systems, Stryker antitank guided missile (ATGM) vehicle (modified ITAS), and Bradley fighting vehicles (IBAS).

The Improved Target Acquisition System includes a second-generation FLIR that uses standard advanced dewar assembly (SADA II) technology, an eyesafe laser rangefinder. The TOW ITAS provides a highly mobile, adverse weather, day-or-night capability needed by early entry forces to destroy advanced threat armor at greater standoff ranges in the main battle area. The ITAS features an automatic boresighting capability, aided target tracking, embedded training, BIT/BITE and traversing unit modifications. These features ensure crew survivability through increased standoff range and improved performance in the battlefield environment.

The TOW weapon system, with its ex

ended-range performance, is the long-ange precision heavy antitank/assault nissile of choice for the U.S. Army Stryker, Bradley, ITAS-Humvee platforms and the J.S. Marine Corps Humvee, light armored ehicle and AH-1W Cobra platforms. In ad-lition, it can be operated in a dismounted round mode.

The TOW weapon system entered its pro-luction and deployment phase in 1970. ince then, multiple variations of the missile nd launcher systems have been fielded.

Recent developments include the devel-pment of the bunker buster missile for se by the Stryker brigade combat teams nd the introduction of the TOW 2B Aero, n extended-range (4.5-kilometer) version f the TOW 2B missile. Future improve-nents will include replacing the wire uidance system with a wireless radio fre-uency (RF) guidance system.

The **Javelin** is a shoulder-launched, fire-nd-forget, manportable, antiarmor and ssault weapon system optimized for at-acking and destroying armored tank tar-ets, buildings, bunkers and hovering heli-opters. It replaces the Dragon antiarmor issile system, providing a medium-range ultipurpose capability for infantry, scouts nd combat engineers. The system is lethal gainst tanks with conventional and reac-ve armor and against a variety of other rgets.

Javelin missile

Javelin has been used very successfully in Iraq and Afghanistan to defeat armored targets, bunkers and hard-to-reach targets in urban terrain, without endangering friendly forces or noncombatants.

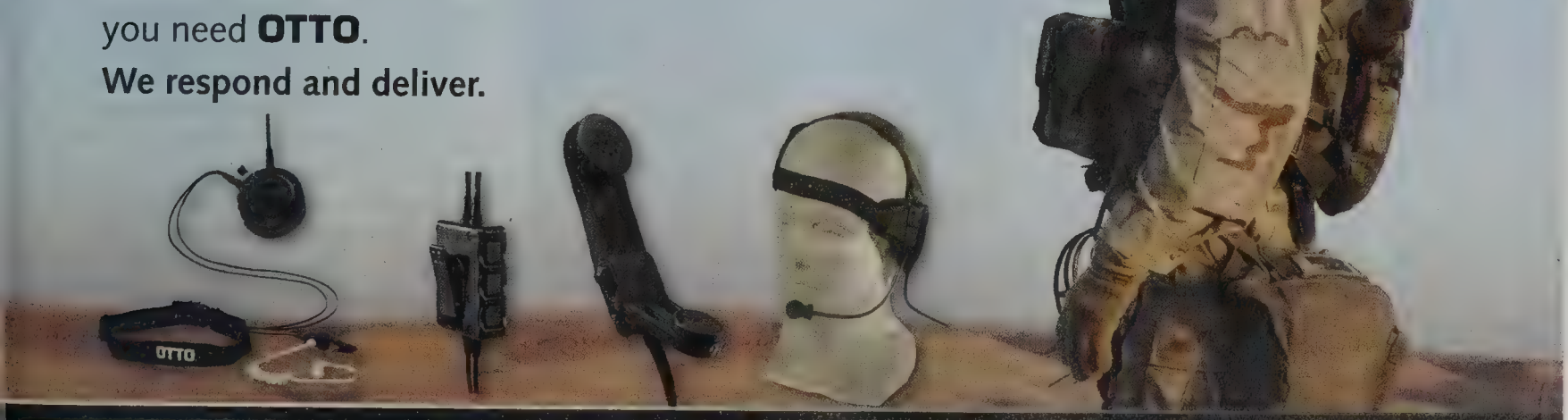
Javelin has two major tactical components: a reusable command launch unit (CLU) and a missile sealed in a disposable launch tube assembly.

The CLU is a compact, lightweight, target-acquisition device incorporating an integrated day/second-generation thermal sight, launch controls and a gunner's eyepiece display. It provides target engagement capability in adverse weather and countermeasure environments. The CLU may also be used in the stand-alone mode for battlefield surveillance and target detection; this has proven effective both in Afghanistan and Iraq.

The missile is 127 mm in diameter with a staring, imaging infrared seeker; a feature-based tracker; a lethal warhead; dual in-line eject; a solid-propellant flight motor; gunner-selected direct-attack or top-attack engagement guidance options; and the Javelin launch tube assembly, an expend-able handling launch tube to house the missile, power pack attachment and CLU interface. The complete round is described as "wooden," as it requires no pre-use test-ing or maintenance. Its shelf life is 10 years.

LOUD AND CLEAR

When you need reliable two-way communications accessories, you need **OTTO**.
We respond and deliver.



Speaker Mics • Surveillance • Headsets • Bone Conduction Systems • Custom Solutions

www.ottoexcellence.com
info@ottoexcellence.com

© Copyright 2012 OTTO Engineering, Inc. ® OTTO and the OTTO Expect Excellence logo are registered trademarks of OTTO Engineering, Inc. All rights reserved. 2012-52

MADE IN U.S.A.

Designed, Manufactured and Engineered in the U.S.A.

OTTO®
Expect Excellence.

The Javelin system weighs 49 pounds, and its maximum range is more than 2,500 meters (minimum operational range is 65 meters). Javelin's key technical feature is the use of fire-and-forget technology that allows the gunner to fire and immediately take cover. Additional special features are the top-attack and direct-fire modes (for targets under cover), advanced tandem warhead, imaging infrared seeker, target lock-on before launch and soft launch. Soft launch allows Javelin to be fired safely from enclosures and covered fighting positions, increasing gunner survivability. The time required to prepare Javelin for firing is less than 30 seconds, with a reload time of less than 20 seconds.

Precision Fires Rocket and Missile Systems

The Precision Fires Rocket and Missile Systems (PFRMS) Project Office manages the multiple launch rocket system (MLRS) family of launchers, including the M270A1 and High-Mobility Artillery Rocket System (HIMARS) as well as the entire suite of rockets and missiles for those launchers. The MLRS family of munitions includes the basic, extended-range and guided MLRS rockets as well as the Block I/IA and unitary Army Tactical Missile System (ATACMS).

The **M270A1 Multiple Launch Rocket System (MLRS)** is a highly mobile, automated system that fires surface-to-surface rockets and missiles from a tracked platform derived from the same chassis used by the Bradley fighting vehicle. The MLRS delivers large volumes of firepower in a short time against critical, time-sensitive targets. From inside the cab, the crew of three can fire up to 12 MLRS rockets. The basic rocket warhead carries dual-purpose, improved conventional munition submunitions. MLRS, however, is capable of supporting and delivering all of the MLRS family of munitions (MFOM), including the Army tactical missile system (ATACMS) variants.

The **M142 High Mobility Artillery Rocket System (HIMARS) Launcher** is the newest launcher variant of the MLRS family.

HIMARS is a highly mobile artillery rocket system offering MLRS firepower on a wheeled chassis and is C-130 transportable.

HIMARS carries a single six-pack of MLRS rockets, or one Army tactical missile system (ATACMS) missile, on the Army's new family of medium tactical vehicles (FMTV) 5-ton truck. HIMARS is designed to launch the entire MLRS family of munitions. A platoon of HIMARS advanced concept technology demonstration prototypes were successfully used during OIF, exclusively firing ATACMS missiles in support of ground forces.

The MFOM munition systems have proven to be highly effective and reliable during combat operations.

The **ATACMS Blocks I and IA Missiles** provide long-range, surface-to-surface fire support for Army corps and division operations. Both ATACMS Blocks I and IA are surface-to-surface guided missile systems with antipersonnel/antimateriel (APAM) warheads.

The ATACMS with an APAM warhead attacks soft-area targets at ranges well beyond the capability of existing cannons and rockets. Targets include surface-to-surface missile and multiple rocket launcher units; air defense systems; logistics elements; and command, control and communications complexes.

Lockheed Martin

The ATACMS Block IA, with enhanced accuracy enabled by GPS augmentation to its inertial guidance capability, has a 300-kilometer reach.

Block IA began fielding in FY 1998, and retrofit of selected launchers to Block IA capability occurred simultaneously with missile fielding. Fired from M270A1 and HIMARS launchers, it was highly effective in OIF.

The **ATACMS Unitary Missile** is a U.S. Army requirement developed from lessons learned in Kosovo. It was clear that battlefield commanders needed a weapon with precise guidance and lower lethal radii to minimize collateral damage.

The **Army TACMS Quick-Reaction Unitary (QRU) Missile** is a responsive all-weather, long-range missile with a high-explosive, single-burst warhead fired from the multiple-launch rocket system family of launchers.

The Army TACMS QRU is converted to the unitary configuration by replacing the antipersonnel/antimateriel (APAM) submunitions in Block IA missiles and integrating a proven government-furnished unitary warhead (470-pound SLAM/HARPOON) and fuze into the warhead section.

The missile has a range of 270 kilometers and provides the Army the interim capability to attack high-payoff, time-sensitive targets without placing combat or support aircraft and crews at risk.

Its precision accuracy, the absence of potential submunition duds and reduced lethal radii overcome collateral damage concerns.

The Army TACMS QRU was used effectively in OIF and continues to be highly effective in destroying high-payoff targets in OEF.

The Army TACMS QRU evolved into the TACMS 2000 (T2K) variant with upgraded vertical impact capability to minimize target altitude error. This vertical impact capability maximizes warhead effects in complex urban and mountain terrain.

The **Extended-Range Multiple Launch Rocket System (ER-MLRS)**, which extends the 31.8-kilometer range of the basic rocket to approximately 45 kilometers, provides longer-range rocket capability. The program emerged from lessons learned during Operation Desert Storm, in which senior-level commanders, while applauding the effectiveness of the basic rocket, stated a requirement for greater range. The ER-MLRS is a free-flight, area-fire artillery rocket designed to enhance the capabilities of the MLRS.

The **Guided Multiple Launch Rocket System (GMLRS)** supports Army transformation with increased overmatch capabilities and a reduced logistics footprint over current free-flight rockets. GMLRS is used with the M270A1 and the HIMARS launchers.

The rockets incorporate GPS-aided inertial navigation systems.

A second GMLRS variant is the **GMLRS Unitary.** GMLRS unitary integrates a 200-pound class unitary warhead into the GMLRS. This munition has a range up to 70 kilometers and is effective against multiple targets. Its multimode warhead fuze (impact, delay and airburst) greatly enhances its employment options against many types of targets in various combat environments.

The GMLRS unitary proved its effectiveness in OIF and has become the indirect-fire weapon of choice in urban areas.

GMLRS Alternative Warhead (AW)

The GMLRS AW program will replace the GMLRS DPICM with the mission to attack, neutralize, suppress and destroy targets using rocket-delivered indirect precision fires while decreasing the probability of unexploded ordnance.

GMLRS AW provides field artillery units with medium- and long-range fires while supporting brigade, division, corps, Army, theater, joint/coalition forces and Marine Corps air-ground task forces in full, limited or expeditionary operations.

The GMLRS AW rocket is a solid propellant artillery rocket deployed from either the M270A1 or HIMARS.

GMLRS AW uses an inertial measuring unit (IMU) with global positioning system assistance to guide the rocket to a specific point to deliver effects on a target. GMLRS AW is transported and fired from a launch pod container (LPC) that holds six rockets.

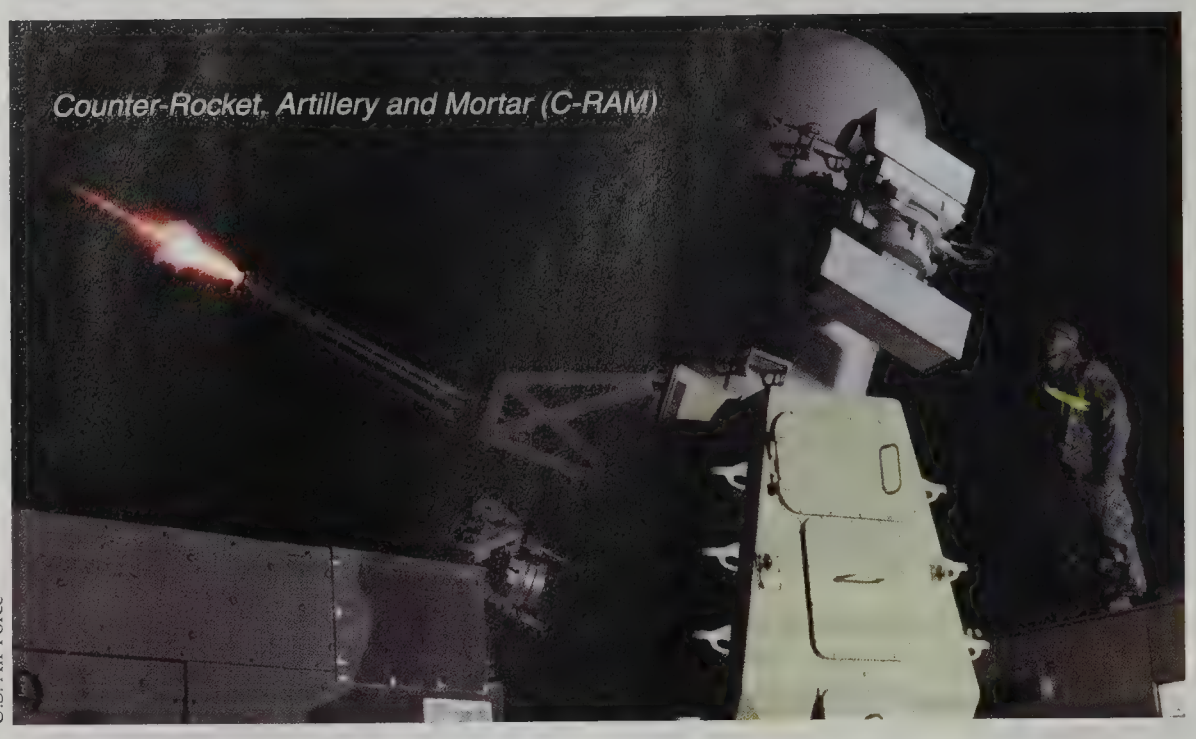
Integrated Air and Missile Defense (IAMD)

In addition to the efforts of its "weapon system" project offices, the PEO Missiles and Space is applying a system-of-systems acquisition approach to meet warfighter requirements and obtain the desired capabilities of the Army Air and Missile Defense Future Force. This approach calls for a restructuring of systems into components of sensors, weapons and Battle Management C4I with a standard set of interfaces among the components, using a standard set of networks for communication. The Army's Integrated Air and Missile Defense acquisition approach significantly affects the PEO strategy for materiel development and systems acquisition.

The **Counter-Rocket, Artillery and Mortar (C-RAM)**, also referred to as **Indirect Fire Protection Capability (IFPC) Increment 0**, is an evolutionary, nondevelopmental program initiated by the Army Chief of Staff in response to the indirect fire (IDF) threat and a validated operational needs statement. The primary mission of the C-RAM program is to develop, procure, field and maintain a system of systems (SoS) that can detect RAM launches; provide localized warning to the defended area with sufficient time for personnel to take appropriate action; intercept rounds in flight, thus preventing damage to ground forces or facilities; and enhance response to and defeat of enemy forces. The current C-RAM SoS is composed of a combination of multiservice fielded and nondevelopmental item (NDI) sensors, mission command systems, and a modified U.S. Navy intercept system (land-based phalanx weapon system [LPWS]), with a low-cost, commercial off-the-shelf (COTS) warning system and local area network (LAN). The C-RAM SoS capability is currently fielded at multiple sites in two theaters of operation, providing correlated air and ground pictures and linking units to the Army Battle Command System (ABCS) and the Joint Defense Network (JDN), with various forms of communications to provide situational awareness and exchange of timely and accurate information to synchronize and optimize automated shape, sense, warn, intercept, respond and protect decisions.

The currently fielded capability uses existing field artillery and air defense sensors (AN/TPQ-36/37 Firefinder, Lightweight Counter Mortar Radar (LCMR), and Sentinel), a commercial-industry-produced warning system (Wireless Audio Visual Emergency System [WAVES]), LPWS,

Guided Multiple Launch Rocket System (GMLRS)



U.S. Air Force

and U.S. Air Force base defense security systems. It is tied to various response systems via the U.S. Air Force, U.S. Marine Corps and ABCS. The Forward Area Air Defense Command and Control (FAAD C2) system, also under the management of the C-RAM Program Directorate, has been enhanced to integrate the sensors, weapons and warning systems to provide command and control for the C-RAM SoS. C-RAM C2 software correlates RAM sensor data, evaluates that threat, provides early warning, directs engagements and cues counter-fire systems and reaction forces. The C-RAM SoS has been fielded to forward operating bases (FOBs) in Iraq and Afghanistan. Sense and warn (S&W) performance has been extremely successful, providing timely warning for more than 2,000 rocket and mortar attacks against C-RAM FOBs, with a minimum of false warnings, saving countless lives. In addition, intercept systems achieved more than 160 successful intercepts of rockets and mortar rounds fired at high-value U.S. Forces-Iraq assets. Current, operational needs statement-based capability enhancements include an improved radar for detection of high/low quadrant elevation (QE) threats, a mobile up-gun LPWS for improved mobility and extended range, integration of military spectrum communications, integration with unmanned aerial systems (UAS) universal ground station (UGS), and dynamic clearance of fires. Following the drawdown of efforts in Iraq, C-RAM sense-and-warn assets began supporting State Department and Office of Security Cooperation-Iraq (OSC-I) operations. At this time, it is anticipated that the LPWS assets in Iraq will be returned to the continental United States for reset/recap, upgraded to a mobile up-gun configuration, and fielded to an IFPC intercept battalion.

The IFPC is the Army's acquisition program for the transition of C-RAM SoS capability to the modular force and will provide an incremental fielding of all current C-RAM capabilities (sense, warn, intercept, respond, command and control (C2), shape and protect). IFPC Increment 1 fields a warn capability as a horizontal technology insertion, using current C-RAM warning equipment to provide early, localized warning to the brigade combat teams (BCTs). It will employ the Air Defense Airspace Management (ADAM) cell already resident in the BCT headquarters as the C2 element, use the Firefinders and LCMRs already in the target acquisition platoon of the Fires battalion as the sense element, and add existing C-RAM warning devices, controller, and dedicated communications devices between the radars and the ADAM cell. IFPC Increment 1 additional equipment (for example, speakers and masts) will warn localized affected areas, and a wireless LAN, along with the FAAD C2 system, already existing in the BCT's ADAM cell, will integrate the sensors and warning equipment, thus providing real-time situational awareness and understanding. The Air and Missile Defense Workstation (AMDWS) is also organic to the BCT's ADAM cell and will pass the RAM events and data to the Battle Command/Mission Command Data Dissemination Service/Publish and Subscribe Services (DDS/PASS) servers to provide situational awareness and understanding at all BCT units/echelons. The IFPC Increment 1 Capability Production Document was approved in August 2010.

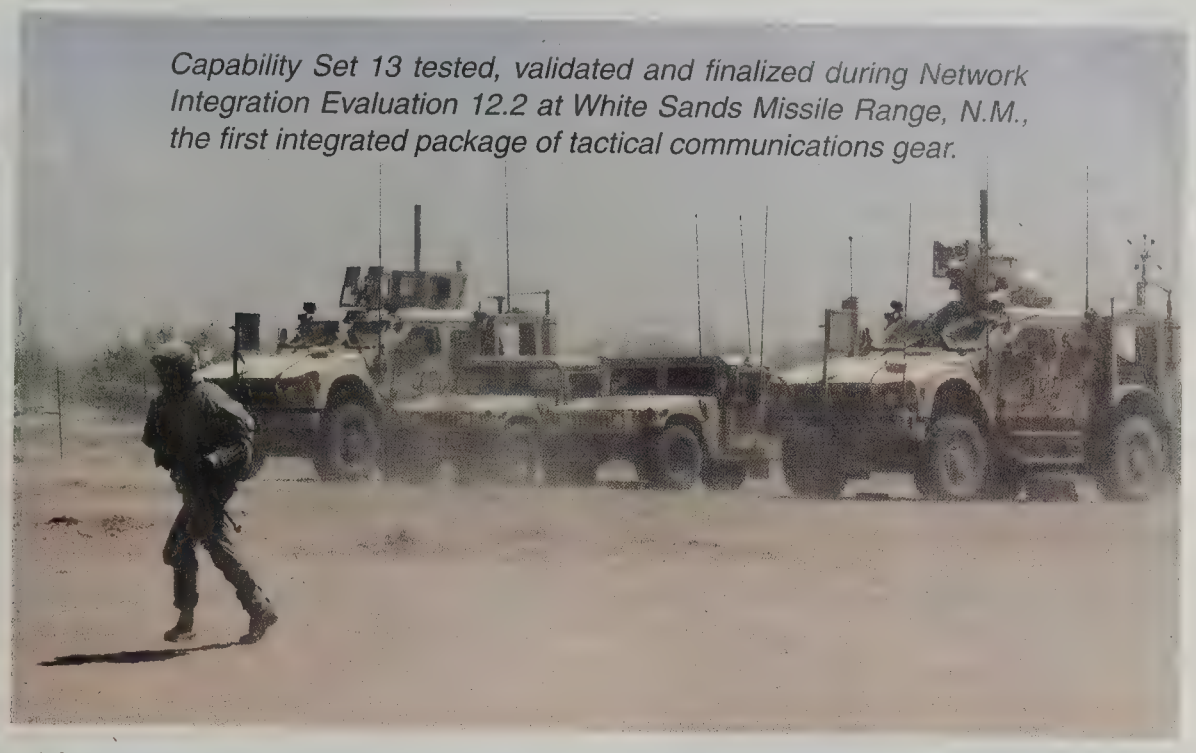
The **Air and Missile Defense Planning and Control System (AMDPCS)** provides command-and-control capability for air defense artillery (ADA) brigades, Army air and missile defense commands (AAMDCs), and maneuver brigade combat team and joint force command-and-control elements such as the battlefield coordination detachments (BCDs). Shelter Systems-AMDPCS provides various air defense shelter systems for all echelons built on a baseline known as the air defense and airspace management shelter. The **Air and Missile Defense Workstation (AMDWS)** is a common defense/staff planning and situational awareness/situational understanding software tool. AMDWS is deployed with air and missile defense units at all echelons and is also a component of the ADAM. The AMDWS performs all aspects of AMD force operations. It assists in the automated development of the intelligence preparation of the battlefield, provides situational awareness, and is capable of planning, coordinating, and synchronizing the air, land, and sea battle. AMDWS is the interoperability link for AMD forces with the ABCS and provides the air situational input to the common operational picture.

Forward Area Air Defense Command and Control (FAAD C2). The FAAD C2 system consists of common hardware, software and communications equipment to meet the command-and-control and targeting needs of C-RAM units and AMD battalions. FAAD supports the air and missile defense battalion mission by providing C2I information to higher, adjacent and lower units. Computer displays allow commanders access to databases for the air picture, situation reports, enemy assessments and friendly forces. The FAAD C2 system can process information classified up to secret. The system provides an embedded training capability that will replicate those situations encountered in actual mission operation. Evolving software capabilities are added with each new version throughout the FAAD C2 development cycle. The FAAD C2 system also has the capability to interface with joint and NATO C2 systems. To accomplish its mission, FAAD C2 is integrated into and interoperates with both the ABCS and AMDWS. The AMDWS is integrated in FAAD C2-equipped battalions at the ADA battery and battalion command posts and is a product under the AMDPCS program. The FAAD C2 engagement operations subsystem provides the joint air picture via implementation of two-way TADIL-A, -B and -J links. The FAAD C2 system is the backbone for the C-RAM system and assists with digitization of the battlefield by providing air situational awareness to the supported force, alerting and cueing to C-RAM systems and FAAD weapons. The FAAD C2 system supports C-RAM by receiving and correlating sensor inputs, then alerting the intercept system and the sense and warn elements of a mortar, artillery and/or rocket attack. The FAAD C2's ever-expanding mission encompasses the detection, acquisition, and identification of enemy mortar and rocket projectiles, helicopters, fixed-wing aircraft and unmanned aerial vehicles; the distribution and dissemination of C2I data among the air and missile defense units and combined arms elements; the provision of early warning; and alerting the supported forces

COMMAND, CONTROL, COMMUNICATIONS, COMPUTERS AND INTELLIGENCE (C4I) SYSTEMS AND CAPABILITY SET 13

The **Network** is the Army's top modernization priority, and the Army is changing the way it supplies network systems and capabilities to operational units by incrementally aligning the delivery of new technology with the Army force generation (ARFORGEN) process. This effort will drive networked capabilities down to the small unit and soldier level—those at the tactical edge who need these critical capabilities the most. Through a process known as **Capability Set Management**, the Army has adopted acquisition practices and is aligning programs so that operational units receive better capabilities more quickly through integrated and sustainable network capability sets.

The capability sets will enhance vertical and horizontal connectivity and provide an integrated network baseline from the static tactical operations center (TOC) to the dismounted soldier. Fielding the Network as an integrated capability set throughout a brigade, rather than fielding individual pieces of equipment, provides soldiers with the best capability gap solutions and dramatically reduces or eliminates the integration burden on deployed troops. The first capability set, **Capability Set 13 (CS 13)**, will be fielded to Army brigade combat teams starting in fall 2012. CS 13 was developed and validated through the Network Integration Evaluations (NIEs) and agile process, the Army's new strategy to rapidly evaluate, procure and field network technologies in a more cost-effective manner.



Capability Set 13 tested, validated and finalized during Network Integration Evaluation 12.2 at White Sands Missile Range, N.M., the first integrated package of tactical communications gear.

The centerpiece of CS 13 is Warfighter Information Network-Tactical (WIN-T) Increment 2, a major upgrade to the Army's tactical communications backbone that introduces mission command on-the-move and extends satellite communications to the company level. CS 13 will also deliver unprecedented connectivity to the dismounted soldier through the JTRS Rifleman Radio, a 2-pound radio carried by platoon-, squad- and team-level soldiers for voice communications that also links with handheld devices to transmit text messages, global positioning system (GPS) locations and other data. These devices, known as Nett Warrior (see Individual Equipment listings), act as a smartphone-like mission command system that connects to the Rifleman Radio to provide dismounted leaders with position location information (PLI), text messaging and other applications. CS 13 also reflects the Army's efforts to converge its mission command applications providing situational awareness, collaboration, fires, sustainment, air defense and airspace management.

Critical U.S. Army C4I capabilities are provided through U.S. Army offices such as the **Program Executive Office for Command, Control, Communications-Tactical (PEO C3T)**, **Program Executive Office for Intelligence, Electronic Warfare and Sensors (PEO IEW&S)**, and **Program Executive Office for Enterprise Information Systems (PEO EIS)**. In addition, current and next-generation warfighter support is being delivered through the **Joint Program Executive Office for Joint Tactical Radio Systems (JPEO JTRS)**.

The **Program Executive Office for Command, Control and Communications-Tactical (PEO C3T)** provides soldiers with the networked mission command solutions they require to dominate now and in the future. PEO C3T supports 41 key acquisition programs that develop, acquire and field a diverse range of products for the Army including mission command software applications, power generators, radios, computers, satellite terminals, communications security devices, servers, and the integrators that allow all the systems and components to function seamlessly.

PEO C3T also sustains the force with over-the-shoulder training and system troubleshooting so that soldiers can focus on their prime objective of engaging the enemy.

Headquartered at Aberdeen Proving Ground, Md., PEO C3T has a workforce of almost 1,600 employees with a total annual budget of $4 billion. Facing emerging fiscal constraints, PEO C3T is using innovative methods to cut costs, streamline processes and quickly adapt in rapidly delivering advanced network technology to soldiers.

The following representative program sampling reflects how PEO C3T continues

"It's a jungle out there."

to improve and support current systems, while developing future systems to support the Army's vision of a networked, information-enabled force.

Advanced Field Artillery Tactical Data System (AFATDS) is the digitized sensor-to-shooter link providing automated technical and tactical fire-direction solutions, fire asset-management tools and decision support functionality. AFATDS functions from firing platoons through echelons above corps. AFATDS is the fire support node of the Army Battle Command System (ABCS). It enhances dominant maneuver, survivability and continuity of operations for Joint force commanders.

The **AN/PRC-117G** provides tactical and homeland defense forces and emergency operations elements with stand-alone, terrain-independent, robust communications for line-of-sight/beyond-line-of-sight (LOS/BLOS) secure voice and data communications. It also provides long-distance, wide-area, gap-free, fixed or on-the-move, ground, maritime and ground-to-air communications.

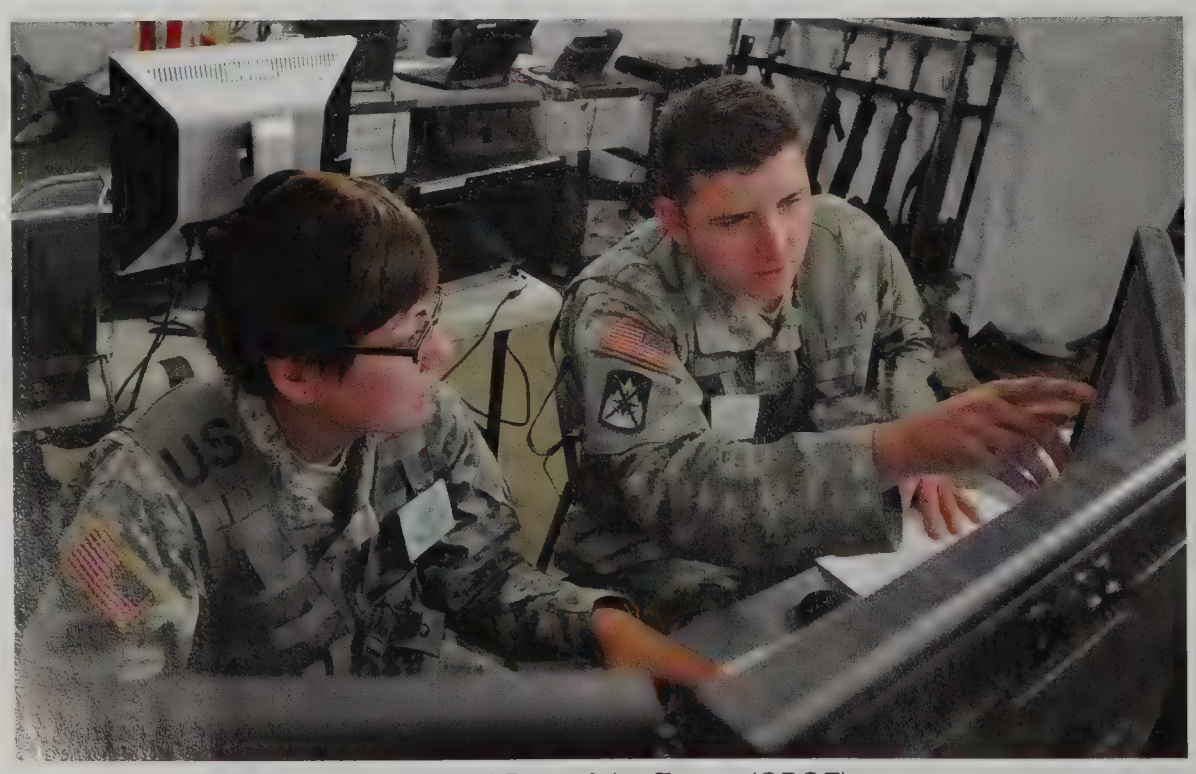
The **Army Key Management System (AKMS)** consists of three subcomponents: local communications security management software, automated communications engineering software and a simple key loader. Under the umbrella of the National Security Agency's electronic key management system, AKMS provides tactical units and sustaining bases with an organic key generation capability and an efficient, secure means of distributing electronic keys.

The **Combat Survivor Evader Locator (CSEL)** is a handheld survival radio in use by Army Aviation units and special operations forces to assist in recovering isolated crews in the event of a downed aircraft. CSEL allows rescue execution orders to be delivered within minutes, increasing the probability of rescue and reducing risk to rescue forces.

Command Post of the Future (CPOF) and the **Mission Command Workstation** provide the commander with a comprehensive view for informed battlefield decision making. CPOF provides situational awareness and collaborative tools for tactical decision making, planning, rehearsal and execution management from the corps to battalion levels. It provides 2-D and 3-D map-centric collaboration supported by voice over Internet protocol. CPOF is the core framework for the mission command collapse workstation, which provides collaborative command-and-control/maneuver, fires, sustainment and airspace functions on a common workstation. **Command Web** is a lightweight, Web-enabled tool that extends the strong collaboration capabilities of CPOF and Mission Command Workstation to additional users down to the company level.

Data Products are software products that allow Force XXI Battle Command Brigade and Below (FBCB2)-Blue Force Tracker (BFT), Army Battle Command System (ABCS) and other C4ISR systems to share situational awareness, collaboration and mission command data with each other over the tactical Internet.

Force XXI Battle Command Brigade and Below (FBCB2)-Blue Force Tracker (BFT) is a digital mission command information system providing integrated, on-the-move, timely, relevant information and situational awareness to tactical combat leaders and soldiers from brigade to platform and across platforms within the brigade task force and other Joint forces. It allows soldiers to track one another's locations through blue icons on a digital topographical map and manually add icons representing the enemy and other obstacles to alert other units nearby. FBCB2's next-generation technologies, the **Joint Capabilities Release (JCR)** and **Joint Battle Command-Platform (JBC-P)**, enhance these capabilities with the faster **BFT 2** satellite network, secure data encryption, chat room functionality and an improved user interface. **JCR-Logistics (JCR-LOG)** also integrates FBCB2/BFT capability with the **Movement Tracking System (MTS)**. The MTS is a vehicle-based system that tracks combat support and combat service support vehicles, as well as other assets.



Command Post of the Future (CPOF)

Forward Entry Devices (FED) are handheld devices used by forward observers and fire support teams to transmit and receive fire support messages over standard military radios. They provide a digitized connection between the forward observers and AFATDS, and provide a vital sensor-to-shooter link. The **Lightweight Forward Entry Device (LFED)** and **Pocket-Sized Forward Entry Device (PFED)** are integral parts of the digitized system architecture.

Tactical Electrical Power (TEP) is a family of ruggedized power generators and power distribution equipment that includes the military tactical generator, tactical quiet generator, advanced medium mobile power sources, power units, and power plants (trailer-mounted)—deployable power generation and distribution systems. PEO C3T's Project Manager for Mobile Electric Power is working across its tactical electric power portfolio to cut fuel use, integrate alternative energy sources and improve operational energy efficiencies.

The **Warfighter Information Network-Tactical (WIN-T) Increment 1**, the Army's tactical communications backbone, provides "networking at the quick halt." WIN-T Increment 1 is a joint-compatible communications package that allows the soldier to use advanced networking capabilities and retain interoperability with current force systems and future increments of WIN-T.

The **Warfighter Information Network-Tactical (WIN-T) Increment 2** introduces mission command on-the-move and extends satellite communications to the company level. It also provides a self-forming, self-healing network and improved Network Operations (NetOps) tools for planning and monitoring the network.

The **Warfighter Information Network-Tactical (WIN-T) Increment 3** will provide full network mobility and introduce the air tier, which provides a three-tiered architecture consisting of traditional LOS, an airborne layer through the use of unmanned aerial vehicles (UAVs) and other airborne platforms and satellites.

The mission of **Program Executive Office Intelligence, Electronic Warfare and Sensors (PEO IEW&S)** is to provide affordable, world-class sensor and electronic warfare capabilities, enabling rapid situa-

AN/TPQ-53 radar system

ional understanding and decisive actions. PEO IEW&S products can be used for targeting, situational awareness, force protection, and reconnaissance, surveillance and arget acquisition (RSTA). These critical ystems are integrated into the network's ayers and enable persistent surveillance, llowing the joint and coalition warfighter o control time, space and the environment, while greatly enhancing survivability and ethality.

PEO IEW&S rapidly transforms requirements and validated field requests into reality and supports critical current operations ncluding counter-improvised explosive levices (IEDs); sensors for counter-rocket, rtillery and mortar, and the integrated intelligence architecture. PEO IEW&S is responsible for a multibillion-dollar portfolio onsisting of a combination of more than 10 programs of record and quick-reaction apabilities. Addressing soldiers' needs nd providing them with capabilities in the ost effective and financially responsible anner is paramount to success. These ystems are integrated with other intelligence assets into a system-of-systems architecture that provides ISR, force protection, and RSTA collection capabilities, data epositories, services and exploitation capabilities across coalition boundaries. ielded assets range from airborne and round sensors to the network connectivity nd analyst tools used to exploit the large mounts of collected information.

The **AN/TPQ-53 Radar** is a highly mobile radar system that automatically detects, classifies, tracks, and locates the oint of origin of projectiles fired from ortar, artillery, and rocket systems with fficient accuracy for first-round fire for fect. It mitigates close-combat radar coverage gaps and will replace a majority of e current Firefinder Radars, modernizing most brigade combat teams (BCTs) and res brigades. The AN/TPQ-53 system ill interoperate with future battle command systems (BCSs) to provide the maneuver commander with increased counterfire radar flexibility. The AN/TPQ-53 is capable of being deployed as part of the indirect fire protection capability (IFPC) system of systems to provide a sense-and-warn capability for fixed and semi-fixed sites. The AN/TPQ-53 system provides increased range and accuracy throughout a 90-degree search sector (in stare mode), as well as 360-degree coverage (rotating) for locating mortar, artillery and rocket firing positions.

Among the system's numerous key attributes are its quick setup time with an emplacement of five minutes, reduction of soldier support (from 12 soldiers on the Q-37 and six soldiers on the Q-36 to four soldiers for the AN/TPQ-53), ability to be transported via C-130 and linkage to the advanced field artillery tactical data system (AFATDS) and forward area air defense command and control (FA2DC2).

The **Common Infrared Countermeasure (CIRCM)** subprogram is the next-generation advanced threat infrared countermeasures (ATIRCM) and will provide the sole acquisition of future laser-based infrared countermeasure systems for all rotary-wing, tilt-rotor, and small fixed-wing aircraft across the DoD. The CIRCM is a cooperative effort between the Army (lead) and Navy to provide modular self-protection suite upgrades for DoD aircraft. CIRCM will be developed as a directed infrared countermeasure (DIRCM)/laser-based system that can be used with various missile warning systems (MWS) currently installed on or planned for installation on Army, Navy or Air Force aircraft.

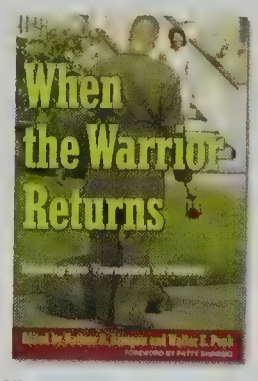
CIRCM will be designed to pay particular attention to multi-spectral manportable air defense systems (MANPADS) and advanced air-to-air infrared and/or pseudo-electro-optical weapons threats that can target rotary-wing, tilt-wing and slow-moving fixed-wing aircraft in the midst of ground clutter.

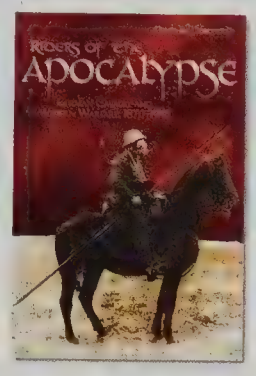
The **Prophet System** is a day/night, all-weather, near real-time, ground-based tactical signals intelligence/electronic war-

AUSA BOOKS

The AUSA Book Program offers quality military books about Army heritage, military theory and policy and military force in the modern world. This program permits AUSA members to purchase these and other books at a discount rate.

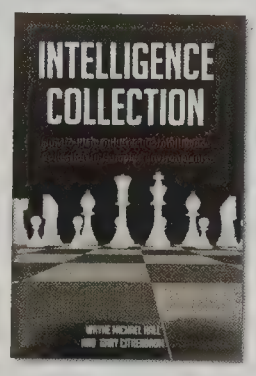
To order books, visit the AUSA website at **www.ausa.org** or contact Dr. Roger Cirillo at 800-336-4570 ext. 6653 or via e-mail at rcirillo@ausa.org.

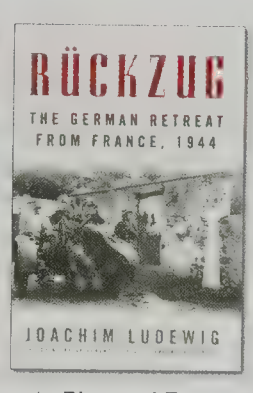




When the Warrior Returns by Nathan Ainspan and Walter Penk (Naval Institute Press, September 2012)

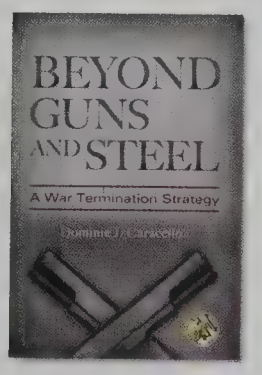
Riders of the Apocalypse: German Cavalry and Modern Warfare by David R. Dorondo (Naval Institute Press, May 2012)





Intelligence Collection: How to Plan and Execute Intelligence Collection in Complex Environments by Wayne Michael Hall and Gary Citrenbaum (Praeger Security International, June 2012)

Ruckzug: The German Retreat from France, 1944 by Joachim Ludewig (University Press of Kentucky, September 2012)



Beyond Guns and Steel: A War Termination Strategy by Dominic Caraccilo (Praeger Security International, January 2011)

Blueprints for Battle: Planning For War in Central Europe by Jan Hoffenar and Dieter Kruger (University Press of Kentucky, September 2012)

fare capability organic to the brigade combat team (BCT), Stryker BCT and battlefield surveillance brigade. The Prophet family of systems provides force protection, situational awareness, and actionable intelligence to the warfighter.

Prophet Enhanced (PE) serves as the Army's premier ground signals intelligence platform, building upon the success and lessons learned from preceding Prophet systems including Prophet Spiral 1, Triton III and a quick reaction capability version of Prophet Enhanced.

PE gives soldiers a more robust operational capability, allowing for easier movement of the dismount system. Also, by increasing the number of communications platforms, operators are afforded flexibility to potentially conduct simultaneous, split, based, fixed and mobile operations.

PE is installed onto Panther variants of the mine-resistant ambush-protected vehicle.

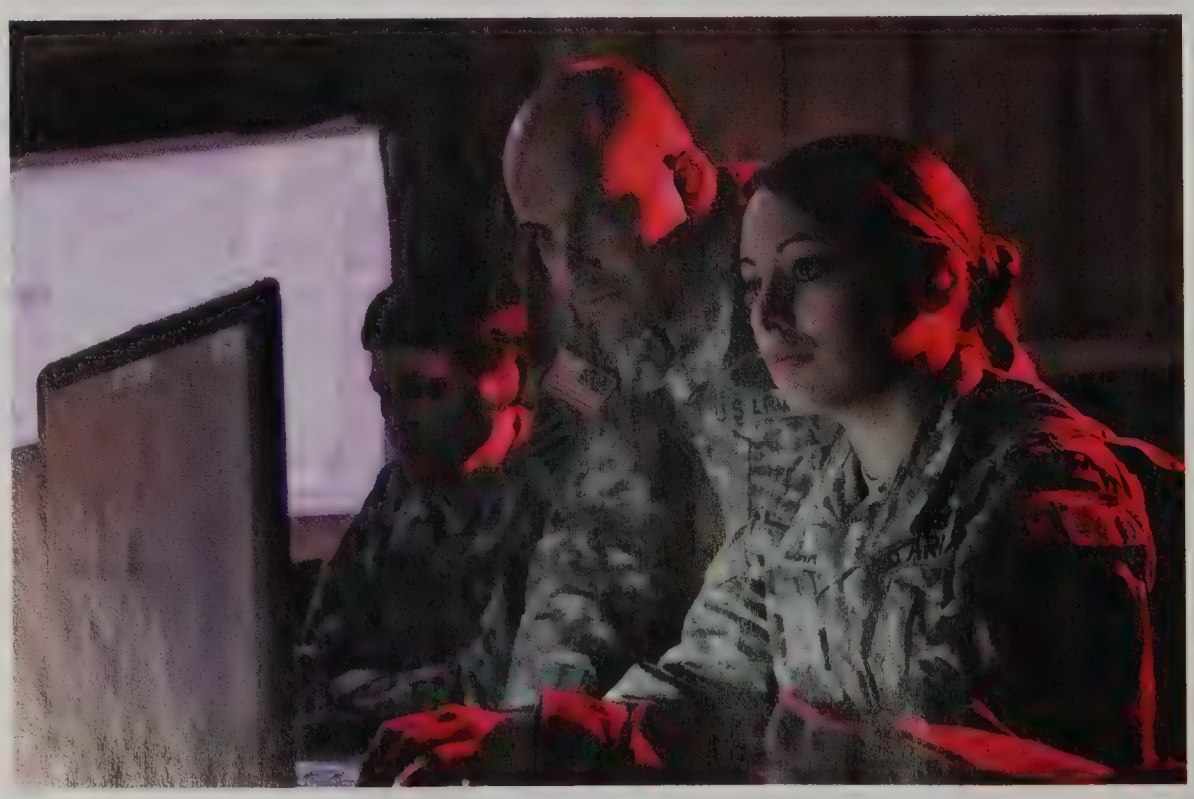
The **Distributed Common Ground System-Army (DCGS-A)** is the Army's cornerstone intelligence-processing and analytical system. Historically, every sensor had its own, unique ground system to receive, store, and process intelligence data. This forced the analyst to go to multiple separate ground stations to analyze other sensor data, and posed tremendous challenges to sharing intelligence.

DCGS-A has been built to the intelligence community framework standards and delivers unprecedented real-time, integrated intelligence analysis—fused into one common accessible format. DCGS-A receives data from multiple sensors (space-based, airborne, terrestrial) and multiple intelligence sources—signals intelligence, imagery, human intelligence and so on. With DCGS-A, the analyst can perform valuable multidisciplined intelligence, surveillance and reconnaissance (ISR) analysis and easily share that data with other Army units, sister services and coalition partners. Better analysis and increased collaboration mean better intelligence support to the tactical commander.

DCGS-A provides an integrated solution that operates in a secure, distributed and collaborative environment. The system provides commanders, decision makers, and analysts at all echelons with real- and/or near real-time ISR data, information, and analytical products. DCGS-A utilizes software capabilities across multiple intelligence disciplines to enable intelligence analysts to obtain, process and disseminate the information they need to provide commanders with actionable intelligence at all echelons. The enhanced speed, accuracy and relevance of the ISR effort provide commanders the intelligence information they need when they need it to plan and conduct full spectrum operations in counterinsurgency environments and across the full range of military operations.

DCGS-A uses the latest Cloud technology to rapidly gather, collaborate and share intelligence data to shape combat operations. The DCGS-A Cloud provides cutting-edge, multi-intelligence analytical capabilities that allow analysts to explore a massive amount of intelligence data in different ways and rapidly fuse critical information into an accurate response. DCGS-A has successfully deployed the first tactical Cloud Node in the Department of Defense.

The mission of **Enhanced Medium Altitude Reconnaissance and Surveillance System (EMARSS)** is to provide persistent capability to detect, locate, classify/identify, and track surface targets with a high degree of timeliness and accuracy to the brigade combat team (BCT) through mission overwatch in day/night, near-all-weather conditions.



Distributed Common Ground System-Army (DCGS-A) operations

EMARSS is a multi-intelligence airborne intelligence, surveillance and reconnaissance (AISR) system dedicated specifically to direct support of the tactical commander. It enhances BCT effectiveness by defining and assessing the environment and providing surveillance, targeting support and threat warning. EMARSS is a key contributor to the tightly woven, highly integrated network of intelligence and operations warfighting functions necessary to maintain contact and develop targets of interest in an irregular warfare environment and across the range of military operations. The EMARSS system is designed to provide direct support to the BCT commander but can also support regimental combat team (RCT), division or other tactical units as required by the tactical situation.

The EMARSS AISR capabilities include an electro-optical/infrared (EO/IR) with full-motion video (FMV) sensor, a communications intelligence sensor and an aerial precision guidance (APG) sensor, all supported by line-of-sight (LOS) and beyond-line-of-sight (BLOS) communications and hosted on a manned, medium-altitude derivative of the commercial Hawker-Beechcraft King Air 350ER aircraft. EMARSS operates as a single platform in support of tactical missions, but through connectivity to tactical and national networks it also contributes to the joint overall AISR constellation.

EMARSS contains a tailored set of distributed common ground system-A (DCGS-A)-enabled software and ISR processing software functionalities to process, exploit and rapidly disseminate the intelligence derived from the imagery sensor. The communications intelligence sensor is controlled through LOS and BLOS communications at the DCGS-A, where processing, analysis and timely reporting to the supported tactical force are accomplished. Selected EMARSS imagery is immediately processed on the aircraft, and the collected imagery is also forwarded to the DCGS-A for further processing, analysis and reporting. EMARSS complies with the DoD information technology standards registry and defense information systems network (DISN). This architecture permits interoperability with any multiservice or joint system that complies with DoD-standard formats for data transfer and dissemination.

The **Machine Foreign Language Translation System (MFLTS)** is a software-only program that will develop, acquire, field and sustain a basic automated foreign speech and text translation capability into Army systems of record. The language development design will allow for technical insertion of additional software language modules, performing translation as required by the Army. It is not a device or a set of stand-alone languages; rather, it is a software system that uses a modular oper

system architecture solution to accept plug-in language modules written to an MFLTS established set of standards.

These integrated automated translation capabilities will be applicable across three different system configurations: a hand-held/wearable portable device, a laptop/mobile device, and within a networked/Web-enabled system. MFLTS will be interoperable with commercial off-the-shelf (COTS) or government off-the-shelf (GOTS) automation equipment including the DCGS-A, ground soldier systems, and counterintelligence human intelligence automated reporting and collection system (CHARCS).

The MFLTS program achieved milestone A approval and was awarded a contract in fiscal year (FY) 2011 for the technology development phase. The contractor began a prototyping effort focused on the architectural framework design to produce and manage MFLTS capability in Web-enabled, mobile and portable configurations through applications (speech to speech and text to text, under initial capabilities).

The engineering and manufacturing development phase of the MFLTS program will commence in FY 2013 with initial operating capability (IOC) for Pashto, Dari, Iraqi Arabic and Modern Standard Arabic.

The **Persistent Threat Detection System (PTDS)** is a quick reaction capability serving both intelligence and operational communities with real-time situational awareness, counter-IED, force protection and forensic capabilities. It is a significant ISR and force multiplier for the warfighter.

Persistent Threat Detection System (PTDS)

PTDS is a 74,000-cubic-foot, helium-filled, tethered aerostat envelope equipped with dual high-resolution EO/IR (Wescam MX-20s) sensors or an MX20 sensor with either a ground moving target indicator/dismounted moving target indicator radar (STARLite) or an EO/IR wide-area sensor (Kestrel) payload. PTDS is integrated with existing acoustic sensors that cue the aerostat payload to provide near real-time eyes on target. PTDS provides a persistent surveillance and dissemination capability allowing quick reaction forces to find, fix, track, target and engage direct- and indirect-fire threats.

PTDS has proven its effectiveness in a combat environment by providing actionable information to the warfighter and ranks on U.S. Forces-Afghanistan's Top 10 list of urgently needed capabilities. Since 2010, 46 PTDS have been fielded to meet

VT Systems

Our family of companies has proven ability to meet your needs

» VT Hackney
Mobile Command Centers

» VT Halter Marine
Shipbuilding

» VT iDirect
Satellite-based IP Comm Technology

» VT LeeBoy
Road Construction Equipment

» VT MÄK
Training and Simulation

» VT Miltope
Rugged Computers and Electronics

» STA Mobile
Aircraft MRO and Modifications

» STA San Antonio
Aircraft MRO and Luxury Interiors

Visit us at
AUSA Booth 2613
and meet
the authors of
1001 Things to Love About Military Life.
Receive your free copy
compliments of
VT Systems.
(While supplies last.)

A Reputation for Engineering Ability

vt-systems.com AUSA Booth 2613

urgent warfighter requirements with 66 systems becoming operational by the fourth quarter of FY 2012. As of June 2012, PTDS provided more than 500,000 hours of real-time FMV/ISR capability in both Operation New Dawn and Operation Enduring Freedom.

The **Program Executive Office Enterprise Information Systems (PEO EIS)** supports C4I capabilities by providing infrastructure and information management systems to the Army. As the Army's enterprise-wide technical leader for business information systems, PEO EIS enables information dominance by developing and delivering integrated, network-centric capabilities to accomplish the mission today and be prepared for the mission of tomorrow.

Acquisition Business (AcqBusiness) develops enterprise solutions and provides data-management services that support the acquisition community in conducting business. These capabilities enable consistent, effective, and efficient conduct and oversight of acquisition tasks. The planning and development of additional capabilities are ongoing; prototyping, user involvement and capability distribution via a modern and scalable network-centric architecture are core elements of the program strategy. AcqBusiness collaborates with the combat developer, performance assessment and root cause analysis (PARCA), and the Army acquisition community to identify enterprise business requirements and develop solutions that meet critical needs. The program has fielded a substantial infrastructure and variety of functional information technology (IT) tools and services providing an enterprise, service-oriented, business environment that brings the right information to the right people at the right time.

The **Army Enterprise Systems Integration Program (AESIP)** is a vital component of the Army's goal of modernizing enterprise resource planning (ERP) business systems to simplify operations, optimize processes and provide an accurate enterprise view of business information to all users. AESIP integrates business processes and systems by serving as the enterprise hub for the Army's logistics and financial ERP business systems: the General Fund Enterprise Business System (GFEBS), the Army's financial system; the Global Combat Support System-Army (GCSS-Army), the tactical logistics system; and the Logistics Modernization Program (LMP), the national logistics system. AESIP enables integration by linking business processes and data across existing IT systems. This integration optimizes business processes and supports enterprise-level information requirements. AESIP has successfully delivered a Web-based solution for the creation and management of customer and vendor master data and implemented an optimized messaging and hub services capability.

Acquisition, Logistics and Technology Enterprise Systems and Services (ALTESS) provides full life-cycle IT solutions, support, and services to the Army's acquisition community and DoD customers in a secure environment. With significant, secure infrastructure and data center capabilities, ALTESS provides critical support to more than 2.3 million users worldwide. ALTESS operates a state-of-the-art "green" data center with first-class enterprise network operations, systems engineering, applications sustainment and enterprise-level service management capabilities. ALTESS is a leader in providing cost-effective data center services for the Army and DoD.

Computer Hardware, Enterprise Software and Solutions (CHESS) provides architecturally sound standards and policy-compliant IT enterprise solutions from a broad range of industry IT providers to all Army activities and organizations. In accordance with Army Regulation 25-1 *Army Knowledge Management and Information Technology*, CHESS is also responsible for implementation of the biannual consolidated buy (CB) program that offers desktop and notebook computers and printers at a substantial price savings. The CB process is the most cost-effective approach to fulfilling user requirements for these products. It directly supports the Army CIO/G-6 strategy for acquiring products that are fully compliant with federal desktop computing regulations as well as DoD and Army security and interoperability standards.

Defense Communications and Army Transmission Systems (DCATS) manages a suite of more than 100 projects and rapidly delivers these capabilities in direct support of global missions to Army forces, senior national leadership and combatant commands in joint, unified and multinational operations. DCATS provides worldwide strategic satellite communications and wideband control systems, long-haul terrestrial microwave and fiber-optic communications systems, technical control facilities (TCFs), combat service support communications systems, critical power infrastructure, terrestrial communications, combat vehicle intercom systems, in-transit visibility, and other leading technologies to meet current and future Army requirements.

The **Distributed Learning System (DLS)** acquires, deploys and maintains worldwide distributed learning online courseware to ensure that soldiers receive critical training for mission success. Through the Army Learning Management System (ALMS) and Army e-Learning, DLS delivers training to more than 1.4 million soldiers and Department of the Army civilians, manages training information, and provides training collaboration, scheduling, and career planning capabilities in both resident and nonresident training environments.

DoD Biometrics designs, engineers, acquires, deploys and sustains enterprise biometric solutions in multiple operating environments, enabling identity dominance on the battlefield and across the services. DoD Biometrics' systems capture, transmit, store, manage, share, retrieve and display biometric data for timely identification or identity verification. These systems are mission enablers for force protection, intelligence, physical and logical access control, identity management/credentialing, de-

DoD Biometrics—an iris scan

tention and interception operations. DoD Biometrics protects the nation through identity dominance by enabling responsive, accurate and secure biometrics any place, any time, in cooperation with the Department of Homeland Security, Department of Justice, Department of State and other government agencies.

Defense Wide Transmission Systems (DWTS) provides best-value solutions to meet strategic long-haul and base-support communications needs worldwide for the DoD and other government agencies. DWTS has two primary missions: program and life-cycle management of the connect-the-logistician systems, and implementation and sustainment of wide-area transmissions systems. The first mission includes the CSS Automated Information Systems Interface (CAISI) and the CSS Satellite Communications (CSS SATCOM) programs. The second mission includes terrestrial transmissions (global C4 commercialization as well as TCFs) and very small aperture terminal (VSAT) satellite communications transmissions.

The **Force Management System (FMS)** designs, develops and deploys an integrated force-management capability that establishes accurate, consistent and timely force-structure information to the Army force management community. FMS directly supports the Army director, Force

U.S. Air Force/SrA. Jessica Lockoski

Very small aperture terminal (VSAT) satellite dish

Management, whose mission is to manage and allocate manpower and force-structure information; document unit models (requirements and authorizations) over time; and provide organizational and force-structure solutions. FMS is the Army's system to support the DoD and Joint Chiefs of Staff (JCS) J-8 global force management data initiative (GFMDI) mandate, which is the foundation of the Army's network-centric data environment. GFMDI is the authoritative data source for all Army force-structure data, from Department of the Army and state National Guard headquarters down to individual billet and equipment authorizations. FMS incorpo-

YESTERDAY | TODAY | TOMORROW

ALWAYS MOVING FORWARD
TO ADVANCE THE CAUSE
OF THE WARFIGHTER

While we're proud of our accomplishments, Allison Transmission has never been content to rest on our laurels. Our mission is and always has been to provide the highest quality products and services to our customers and the Warfighter

As we continuously upgrade and improve our existing transmissions, we are also working to develop new propulsion products that meet the dynamic and challenging needs of our customers and the Warfighter now and into the future

DRIVING EXCELLENCE
FOR THE WARFIGHTER®

www.allisontransmission.com/militaryproducts

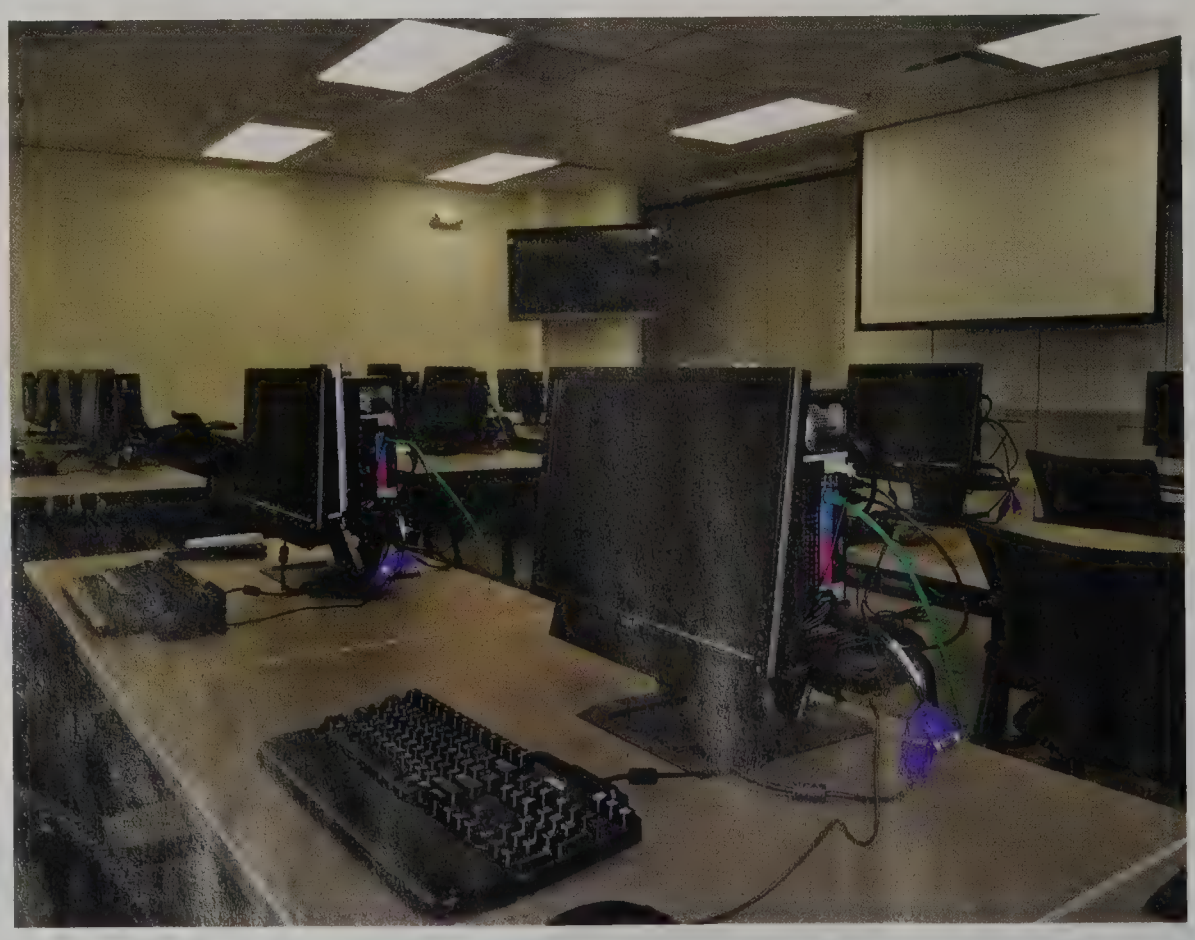
Allison Transmission

rates common software development tools and design and development standards, complying with DoD and Army architecture standards, and incorporating government and industry standards for security. The design also provides for online data warehousing of archived data and streamlined system maintenance.

Global Combat Support System-Army (GCSS-Army) oversees the implementation of the tactical logistics and financial ERP program to integrate business processes and offer an Army-wide view of logistics information from the battlefield. GCSS-Army will allow commanders to anticipate, allocate and synchronize the flow of resources across all areas of operations. Army logisticians will realize significant improvements in mission performance over the current tactical logistics management information systems. GCSS-Army will replace aging, stovepiped tactical logistics systems and associated financial capabilities and communicate with applicable Army command-and-control and joint systems as a follow-on initiative. This Web-based system, supported by laptops and automatic identification technology (AIT) devices, provides essential functionality for limited disconnected operations and for connected operations using robust deployable communications to connect to a centralized database for all users at all echelons.

General Fund Enterprise Business System (GFEBS) integrates financial, real property, cost, and performance data into a Web-based ERP system. GFEBS standardizes business processes and transactional input across the Army, provides real-time visibility of transactions, integrates data and produces full cost data. GFEBS will enable decision makers to better use current resources and enable better analyses of resource implications for programs and budgets. GFEBS brings the majority of Army financial and real property management processes into a single system, integrates performance data and produces full costs. This empowers leaders at all levels to consider the true costs of operations, functions, organizations, and more when making decisions. GFEBS is being implemented across the active Army, Army Reserve and Army National Guard. For the first time, the Army will have a single authoritative source for financial and related nonfinancial data for the entire general fund. Ultimately, GFEBS will replace and/or be subsuming more than 80 Army legacy accounting, financial and asset management systems. When fully implemented, GFEBS will be one of the world's largest ERP systems with some 79,000 users at more than 200 locations around the world and about 1 million transactions each day. GFEBS will enable the Army to better manage current budget requirements and better anticipate and estimate future budget requirements for its more than $140 billion in annual expenditures.

The **Installation Information Infrastructure Modernization Program (I3MP)** modernizes installation infrastructure and terrestrial transmission (voice, video, data and connectivity) by using standard architecture and equipment from multiple vendors. I3MP provides a robust and scalable networked information infrastructure that allows migration to a network-centric, knowledge-based operation and enhances connectivity between forward-deployed forces with continental United States-, Europe- and Pacific-based forces. I3MP is a part of the joint effort to improve and protect LandWarNet by enhancing the infrastructure for better efficiency and effectiveness of the network and Army interoperability across DoD.



A Logistics Modernization Program (LMP) facility

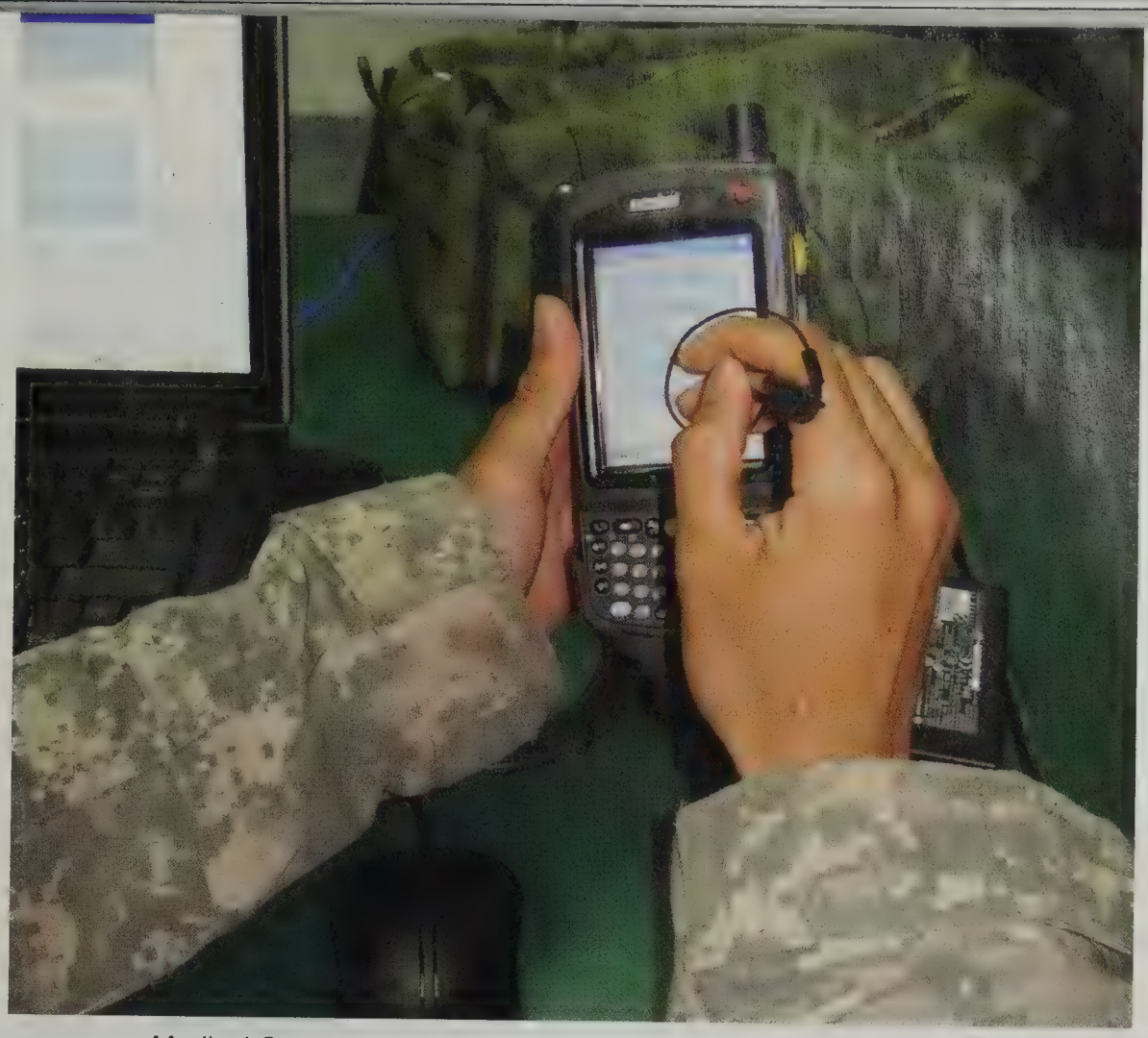
Joint-Automatic Identification Technology (J-AIT) is the Army product management office for total radio frequency identification (RFID) and automatic identification technology (AIT) solutions. As an RFID technology leader, J-AIT provides global asset tracking and Web-based radio frequency in-transit visibility (RF-ITV) services through the upgrade, implementation and maintenance of the RF-ITV system. It offers a single point of contact for acquisition support and technical expertise for joint services, federal agencies, the North Atlantic Treaty Organization (NATO), and multinational forces by establishing and maintaining contract vehicles for the procurement of AIT products and services. J-AIT offers complete program life-cycle support while providing the joint warfighter and coalition partners with automated, near real-time ITV of materiel and equipment worldwide. It also supports multinational information sharing by the DoD with NATO and coalition partners.

The **Logistics Modernization Program (LMP)** provides a comprehensive, modernized logistics solution that enables Army Materiel Command (AMC) to provide world-class logistics readiness to the warfighter. Operational since July 2003, LMP delivers a fully integrated suite of software and business processes that streamlines the maintenance, repair, and overhaul (MRO), planning, finance, acquisition, and supply of weapon systems, spare parts, services and materiel to the soldier. Fundamental to the Army's transformation efforts, LMP replaces a stovepiped legacy systems environment and enables the Army to harness the power of precise, up-to-the-minute enterprise-wide data and improved business processes. The program manages a multibillion-dollar inventory with tens of thousands of vendors and integrates with more than 70 DoD systems. Now fully fielded, LMP operates at more than 50 locations worldwide with approximately 25,000 users, delivering materiel to soldiers when and where they need it.

Land Mobile Radio (LMR) modernizes the Army's continental United States and Pacific nontactical LMR systems in order to support installation public safety organizations and functions. These include first responders, force protection measures and other installation management functions. LMR provides spectrum efficiencies by executing the migration of Army posts, camps and stations to narrowband frequencies as mandated by the National Telecommunica-

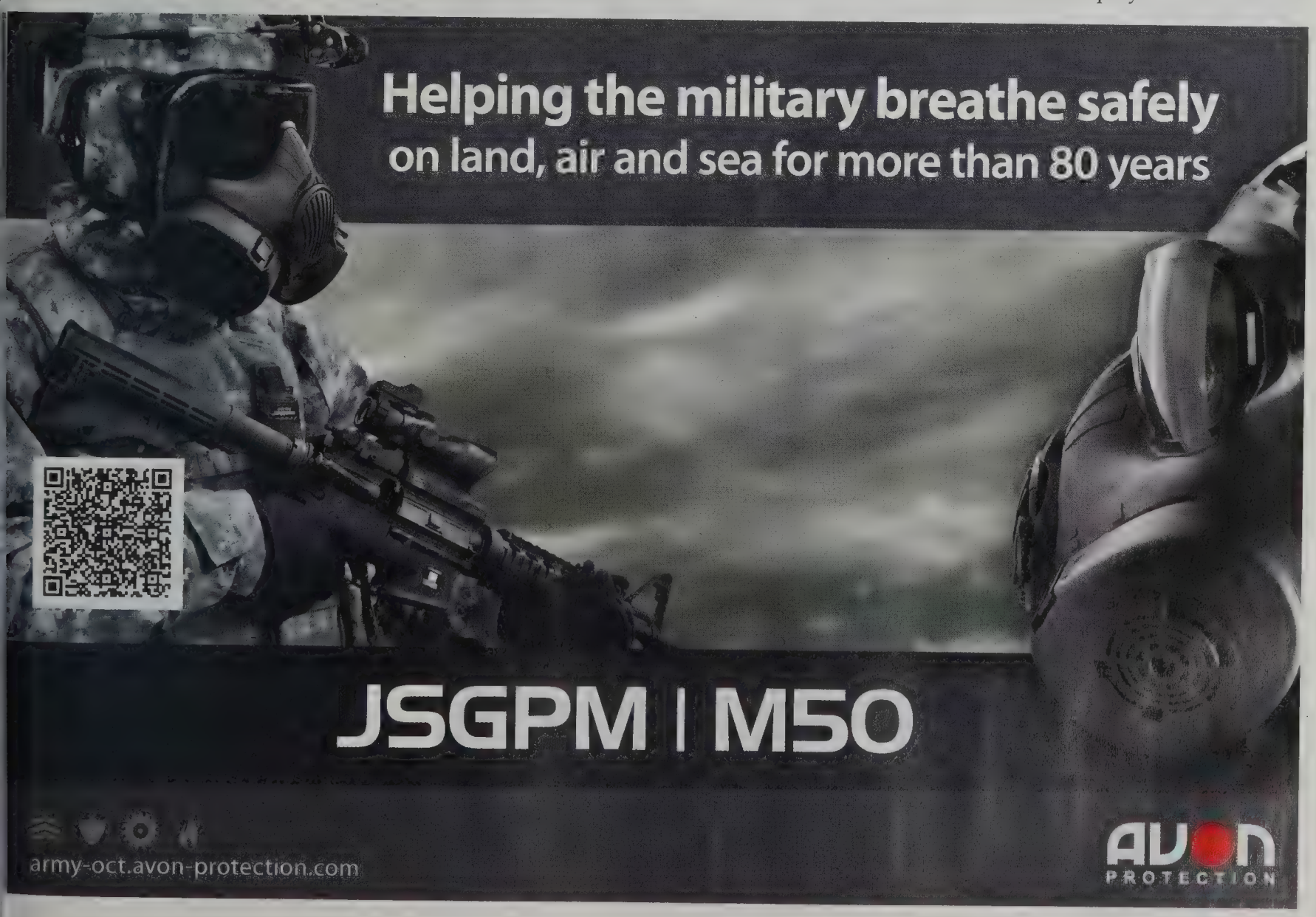
tions and Information Administration. LMR acquires solutions that meet Association of Public Safety Communications Officials P25 interoperability standards.

Medical Communications for Combat Casualty Care (MC4) integrates, fields and supports a comprehensive medical information system, enabling lifelong electronic medical records, streamlined medical logistics and enhanced situational awareness for Army operational forces. MC4's vision is to be the premier enabler for improved tactical health care and better decision making through the power of IT. MC4 is a ruggedized system of systems containing medical software packages fielded to operational medical forces worldwide. MC4 provides the tools to digitally record and transfer critical medical data from the foxhole to medical treatment facilities worldwide. Deployable medical forces use the MC4 system to gain quick, accurate access to patient histories and forward casualty resuscitation information, as well as to deliver health-care services remotely through MC4 telehealth capabilities. Combatant commanders use the MC4 system to access medical surveillance information, resulting in enhanced medical situational awareness. Most importantly, MC4 is helping deployed servicemembers. By equipping deployed medical units with automated resources, MC4 helps ensure that



Medical Communications for Combat Casualty Care (MC4) system

servicemembers have a secure, accessible, lifelong, electronic medical record (EMR), which results in better informed health-care providers and easier access to Department of Veterans Affairs medical benefits. MC4 is a groundbreaking system, managing the DoD's first and most comprehensive battlefield medical recording system and enabling the capture of more than 17 million electronic patient encounters in the combat zone since 2003. MC4 has also trained more than 62,000 deployable medical staff



and commanders and has fielded 48,000 systems to 2,400 units with medical personnel, including Army National Guard and Reserve soldiers, and all active component divisional units in 21 countries. MC4 remains the most widely used, comprehensive information management medical system on the battlefield today.

Power Projection Enablers (P2E) enable the Army with globally connected capabilities that provide the full spectrum of network and information services so that soldiers, commands, and supporting organizations can access, process and act upon information anytime, anywhere, for all operations. This enables the application of force across all phases of joint operations. P2E's tenets are: host the Army's applications, data, and IT services in an interconnected set of globally linked and defended data centers in both a physical and Cloud environment; enable a globally connected Army to build and employ an informed warfighting force that can fight on arrival; build a standardized, global info-structure that is scalable, accessible and defensible; ensure streamlined access to applications, service and data; provide capability to perform joint network operations; and facilitate seamless transition from garrison to training to deployed missions with common services available in all environments.

Satellite Communications Systems (SCS) manages the acquisition, development and modernization of defense satellite communications system (DSCS) and wideband global satellite (WGS) communications system earth terminals and baseband equipment for all military services and agencies. SCS represents a system-of-systems approach for DoD satellite communications sites and facilities. SCS combines baseband and terminal expertise in one organization. The office provides comprehensive acquisition expertise; systems engineering for all strategic, DoD teleport, standard tactical entry point (STEP), and gateway sites; configuration management; and resolution of interoperability and interface issues between baseband and radio frequency equipment. SCS also provides for the application of Army and DoD policies, directives and mandates; planning and execution of advanced technology demonstration programs; and a common integrated logistics support (ILS) leadership to minimize redundancies and jurisdictional issues.

Transportation Information Systems (TIS) supports the joint logistics distribution process by improving efficiency and interoperability within the Army transportation information systems for deployment, sustainment and redeployment activities. Unit movements, theater operations, cargo management and air-load planning applications are used throughout the transportation community that supports soldiers worldwide. The applications support the movement of personnel, equipment, and sustainment cargo from home station to destination and back, thus maintaining visibility of the movement from the tactical, operational and strategic levels. TIS provides complete product life-cycle management, premier transportation and distribution IT solutions, transportation systems functional expertise and a 24/7 support operations center.

Vehicular Intercom System (VIS)

Vehicular Intercom Systems (VIS) allows soldiers to communicate in the high-noise environments of combat vehicles—a high Army safety priority. VIS provides the current VIC-3 intercom system for Army tactical vehicles, including those deployed in the conduct of current operations, as well as new production units. VIS provides systems for vehicle upgrades, resets and re-missioning programs. The VIC-3 allows crews of tactical vehicles to communicate with each other above vehicle and/or combat noise. VIC-3 enables all crew members to receive/transmit over a military radio. It protects soldiers from permanent hearing damage from high noise levels in modern tactical vehicles through the use of state-of-the-art active/passive noise-reducing headsets. VIC-3 is the standard vehicle intercom in more than 50 tactical vehicle variants. Multiple components allow tailoring for specific vehicle configurations and connectivity with many military communications systems.

The **Wideband Control (WC)** project office acquires and installs state-of-the-art strategic satellite network control and planning systems for use with the defense satellite communications systems (DSCS), WGS and commercial satellite systems. All of the subsystems operations and communications between operators and processors are provided at one console location and are viewed from a multi-headed workstation, which allows access to the network database and permits simultaneous display of database components. These systems are typically deployed at wideband satellite operation centers worldwide.

Enterprise Management Decision Support (EMDS) enables the Department of the Army to achieve faster and more confident enterprise management decision support by retrieving and integrating disparate data to create a common access point for holistic and detailed Army operating force data to enhance understanding and decision making. EMDS is a Secret Internet Protocol Router Network-based, Web-enabled enterprise solution that provides integrated data from multiple authoritative data sources to present a common operating picture for units progressing through the Army force generation (ARFORGEN) cycle. Sponsored by the U.S. Army G-3/5/7, EMDS provides an ARFORGEN common operating picture and, soon, a force management common operating picture to support the Army's global force management process of synchronizing, planning, sourcing, resourcing and executing unit and force deployments.

PROGRAM EXECUTIVE OFFICE GROUND COMBAT SYSTEMS

Program Executive Office Ground Combat Systems (PEO GCS) manages the development, systems integration, acquisition, testing, fielding, modernization, and sustainment of the U.S. Army's ground combat systems to provide world-class, affordable and relevant capabilities to our soldiers and marines. Systems include the Abrams main battle tank, Bradley family of vehicles (FoV), self-propelled howitzers, Armored Knight FoV, M113 armored personnel carrier, M88 Hercules, armored multi-purpose vehicle, Stryker FoV, ground combat vehicle, robotics and unmanned ground systems. PEO GCS operates with a multibillion-dollar annual budget and retains more than 1,200 military and civilian employees including three board-selected Army project managers and one Marine Corps joint project manager.

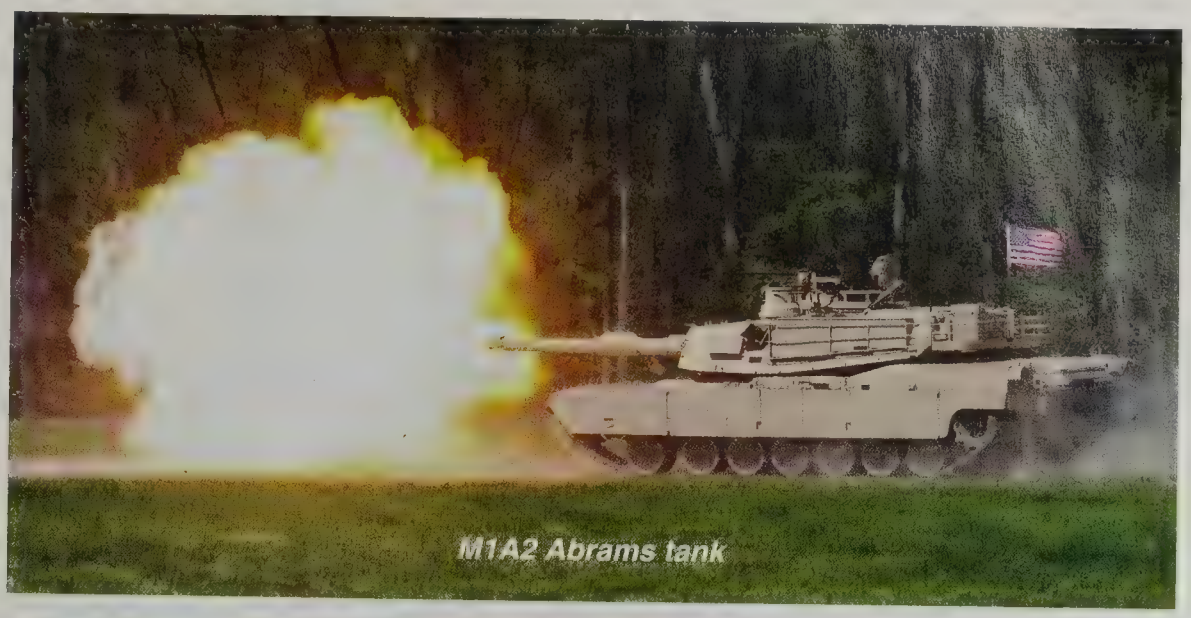
Project Manager Heavy Brigade Combat Team (PM HBCT)

The **Project Manager Heavy Brigade Combat Team (PM HBCT)** serves as the life-cycle manager for the Army's heavy combat vehicles including the Abrams tank, M88 Hercules, Bradley fighting vehicle, M113 armored personnel carrier, Paladin, field artillery ammunition supply vehicle (FAASV), armored multi-purpose vehicle, and Armored Knight FoV.

Product Manager Abrams

The **Abrams Tank** provides soldiers with the mobility, firepower and shock effect to successfully close in and destroy enemy forces on the complex, integrated battlefield. It is the only weapon system that can withstand the impact of high-energy warheads and remain lethal in full spectrum operations. The 120 mm main gun on the M1A1 and M1A2 SEPv2, combined with the powerful 1,500-hp turbine engine and special armor, make the Abrams tank suitable for attacking or defending against large concentrations of heavy armor forces on a highly lethal battlefield and for roles that require shock effect, wide-area surveillance, combined arms maneuver, and mobile direct firepower to support Army mission requirements.

Advanced improvements in lethality, survivability and fighting ability enable the M1A2 SEPv2 tank to remain lethal against future threats. The M1A2 SEPv2 has a digital command-and-control system that provides situational awareness updates to other tanks within the unit. Vetronics architecture ties all electronic components in the tank together and provides increased survivability and supportability. The commander's independent thermal viewer (CITV) provides a hunter-killer capacity, allowing the M1A2 SEPv2



M1A2 Abrams tank

to engage one target while simultaneously tracking another. Improved onboard diagnostics allow the tank to self-diagnose faults without any additional special tools or equipment. The M1A2 SEPv2 also has integrated C4ISR capabilities, which incorporate Force XXI Battle Command Brigade and Below (FBCB2) to provide real-time command and control and situational awareness. The sights use the latest second-generation forward-looking infrared [FLIR] thermal-imaging system for increased lethality and survivability. The SEPv2 package also includes a computerized mass-memory unit and color maps and displays. A thermal management system increases electronic reliability and decreases crew fatigue.

The **Tank Urban Survival Kit (TUSK)** was added as an Operation Iraqi Freedom (OIF) upgrade on the Abrams to improve force protection, lethality, survivability and situational awareness. The inclusion of reactive armor tiles, gun shields, a mine-resistant driver seat, a stabilized commander's weapon station, counter-sniper/anti-materiel mount and loader's thermal weapon sight, and underbelly armor provide enhanced capabilities for the urban fight.

Production deliveries of the M1A2 SEPv2 tank began in February 2005, when these vehicles were used extensively during OIF, in which they were proven to be capable of handling full spectrum operations.

The **Abrams Integrated Management (AIM) Program** is the recapitalization program for the M1A1 tank. Under AIM, M1A1 tanks are completely disassembled and many of the components are refurbished at the Anniston Army Depot, Ala. The assemblies are then shipped to the Joint Systems Manufacturing Center (JSMC) in Ohio, where General Dynamics Land Systems reassembles the tanks to a zero-time/zero-miles standard.

AIM also serves as the venue to apply modifications and upgrades to the tank including embedded diagnostics, improved line-replaceable units, and redesigned hull and turret network boxes.

U.S. Marine Corps Abrams tanks are actively engaged in supporting Operation Enduring Freedom in Afghanistan. Upgraded, digitized M1A2 SEPv2 tanks are being fielded to the active Army, and upgraded M1A1 SA tanks are being fielded to the National Guard.

Product Manager Bradley

Product Manager Bradley manages approximately 6,452 M2/3A2, M2/3A2 ODS, and M2/3A3, as well as 361 M7A3 Bradley fire-support team (BFIST) vehicles and the M707/M1200 Knight family of vehicles.

Bradley Family of Vehicles. The **Bradley M2A3 Infantry/M3A3 Cavalry Fighting Vehicle (IFV/CFV)** facilitates enhanced command-and-control capabilities, provides mobile protected transport of infantry to critical points on the battlefield, and performs cavalry scout and other essential missions. Upgrades in this program include advanced technology in the areas of command and control, lethality, survivability, mobility and sustainability, required to defeat current and future threat forces while remaining operationally compatible with the main battle tank. The M2/3 vehicle armament includes the 25 mm M242 Bushmaster cannon, the TOW II missile systems and a 7.62 mm M240C machine gun.

M2A3 Bradley Fighting Vehicles

The M2A3/M3A3 provides overwatching fires to support dismounted infantry and to suppress and defeat enemy tanks, reconnaissance vehicles, IFVs, armored personnel carriers, bunkers, dismounted infantry and attack helicopters. The IFV version (M2) of the A3 Bradley fighting vehicle is used most often to close with the enemy by means of fire and maneuver. The primary tasks performed by the CFV version (M3) as part of a troop and/or squadron are reconnaissance, security and guard missions.

The A3 is a digitized platform with core electronics architecture and an improved target acquisition system that includes a full ballistic fire-control package with hunter-killer functionality via a commander's independent viewer. Optical improvements include two second-generation FLIRs and day television cameras, which display information to the soldiers in the back of the vehicle and significantly improve the real-time situational awareness for the entire dismounted or mounted crew.

The A3 integrated command-and-control package incorporates the Army's digital command-and-control suite of automated messages, overlays and friend-or-foe graphics that meet the Army's objectives for a fully digitized force. This same digital command-and-control capability was incorporated into the A2 Operation Desert Storm.

The A3 variants reflect the latest iterations of a fighting vehicle family that includes the Bradley M2/M3A0, A1, A2, A2 ODS, IFV/CFV, BFIST vehicles and M2A2 ODS engineer vehicle. Additional Bradley variants, based on the associated tracked M993A1 multiple-launch rocket systems (MLRS) chassis, range from command-and-control systems to armored medical treatment vehicles.

The Bradley Operation Desert Storm-Situational Awareness (ODS-SA) M2/M3A2 conversion implements a digital architecture to mitigate obsolescence and provide commonality. The M2/3 A2 ODS-SA system consists of a modified A2 ODS turret and chassis. The two-man turret consists of a gun/turret stabilization system, a 25 mm gun, a coaxial 7.62 mm machine gun, ammunition feed/storage systems, a dual-tube TOW missile launcher with a launcher erection mechanism/drive and TOW launcher elevation drive, gunner's and commander's stations and sight systems, and a turret processor with associated subsystems and sensors. The chassis contains the power train, suspension systems, the driver's station and squad compartment. The A2 ODS-SA electronic architecture is based on a dual redundant serial data bus. All major turret system units are linked through this bus for signal and data transfer. Sight imagery and graphics data are routed as RS-170 video signals to the operators.

The A2 ODS-SA systems have the im-

proved Bradley acquisition subsystem (IBAS) for the gunner that replaces the Bradley eyesafe laser rangefinder (BELRF) integrated sight unit in the A2 ODS. The sight has a day television and a FLIR channel, both with a narrow and wide field of view. The sight images are displayed as video images to the gunner and commander on cathode ray tube-based biocular virtual image displays. The IBAS also has a gunner's monocular direct-view optics port for the day view channel and a laser range finder for target ranging. The line of sight is inertially stabilized. The M7 BFIST SA (M7 SA) vehicle is the fire support team (FIST) version of the Bradley ODS-SA and was first unit equipped to the 81st Brigade Combat Team, Washington National Guard, in October 2010.

M7A3 Bradley Fire Support Team (BFIST). The BFIST program is executing to the Army Campaign Plan and will complete modularization of the force in fiscal year (FY) 2012 with 20 heavy brigades of A3 BFISTs and seven heavy brigades of M7 BFIST SA. BFIST vehicles are required to conduct various mission scenarios including reconnaissance and surveillance, reporting of enemy activity in the area of operations, reporting of hazards and obstacles to movement, and the coordination of indirect fire support. Both versions have equivalent mobility, survivability, signature and night-vision capability and use common repair parts with the maneuver force they support. Target designation for all available laser-guided munitions is required, including those delivered by mortars and airborne platforms. Dismounted operations are required under some conditions. Extensive and real-time communications with other members of the force and rear-area command posts are required for mission success. Interoperability in the network-centric array of other systems demands full compatibility with the newest C4ISR equipment and procedures.

The **M7 SA BFIST** is one of the two models that replaced all of the M981 (FISTVs). The M7 SA integrates both existing and improved FIST mission equipment packages (MEPs) onto a M3A3 chassis. Features incorporated from the M3A3 chassis include the 25 mm gun, 7.62 mm coaxial machine gun, precision lightweight defense advanced global positioning system (GPS) receiver (DAGR) and the Bradley eyesafe laser rangefinder. The current M7 SA BFIST uses the standalone computer unit (SCU), the ruggedized handheld computer (stowed) and the forward observer system with full interoperability with advanced field artillery tactical data system (AFATDS) fire support networks. The inertial navigation system (INS) provides navigational capability based on a blended inertial/GPS solution.

M1200 Armored Knight

The second model BFIST is the A3 BFIST. It incorporates the FIST MEP with a digitized M3A3 chassis. Features incorporated from the M3A3 chassis include the commander's independent viewer with 360-degree traverse and the IBAS, both second-generation FLIRs, to improve target acquisition and engagement; the 25 mm gun; the 7.62 mm coaxial machine gun; DAGR; and digital command-and-control enhancements. The first unit equipped for the M3A3 BFIST was the 4th Infantry Division.

In addition to the improved features of the M3A3, the A3 BFIST will allow the fire support team to detect, identify and designate targets for precision munitions at greater ranges while remaining protected by the vehicle's armor. The new ranges meet the soldier's needs and allow for laser-guided smart munitions, laser-guided bombs, and missiles for rotary- and fixed-wing aircraft. The first unit equipped with the A3 BFIST with FS3 was the 42nd Infantry Division in August 2011.

M1200 Armored Knight. The Armored Knight family of vehicles assist heavy brigade combat teams (HBCTs) and infantry brigade combat teams (IBCTs) in performing terrain surveillance, target acquisition and location, and fire support for combat observation lasing team (COLT) missions.

Fielded to both IBCTs and HBCTs, the Knight family of vehicles consist of a laser designator and rangefinder, thermal imager, digital command-and-control system,

AUSA FAX NUMBERS

(703) 236-2929 INSTITUTE OF LAND WARFARE, SENIOR FELLOWS	**(703) 841-3505** ARMY MAGAZINE, AUSA NEWS, COMMUNICATIONS	**(703) 841-1050** EXECUTIVE OFFICE	**(703) 236-2927** REGIONAL ACTIVITIES, NCO/SOLDIER PROGRAMS	**(703) 236-2926** EDUCATION, FAMILY PROGRAMS
(703) 243-2589 INDUSTRY AFFAIRS	**(703) 841-1442** ADMINISTRATIVE SERVICES	**(703) 841-5101** INFORMATION TECHNOLOGY	**(703) 525-9039** FINANCE, ACCOUNTING, GOVERNMENT AFFAIRS	**(703) 841-7570** MARKETING, ADVERTISING, INSURANCE

blended inertial/GPS navigation and targeting capability, and a self-defense weapon. Combat observation lasing teams use the Knight precision targeting systems, along with the forward observer systems software, to provide precise far-target location and laser designation for conventional ordnance, laser-guided munitions and precision-guided projectiles such as Excalibur.

First fielded in 2008, the M1200 Armored Knight provides improved survivability for the COLTs and precision strike capability by locating and designating targets for both ground- and air-delivered laser-guided ordnance and conventional munitions. The M1200 Armored Knight adds 360-degree continuous cupola rotation, CREW II, high-frequency radio capability, and M2 .50-caliber capability.

The Armored Knight program continues to evaluate ways to increase the level of protection of the Armored Knight platform. More than 300 M1200 Armored Knights have been fielded to support operations in Iraq and Afghanistan.

The procurement, production and fielding of 465 M1200 Knights is scheduled through FY 2013. To increase force protection, the design, integration and validation of the targeting under armor (TUA) capability will be complete in FY 2012. TUA incorporates a common remotely operated weapon system II (CROWS II) and a common remote stabilized sensor system (CRS3) onto the Armored Knight. This capability will put the soldier under armor for operations—with no degradation in capability—and add an optional fourth crew member station. Additional efforts are under way to upgrade the mission equipment package (MEP) and software to a more open architecture. The program is currently funded for 65 upgraded TUA Knights and will begin fielding in late FY 2013.

Product Manager Armored Multi-Purpose Vehicle (AMPV)

The **Armored Multi-Purpose Vehicle (AMPV)** is the proposed program to replace the M113 series family of vehicles in heavy brigade combat teams including the M113, M577, M1068, and M1064 vehicles currently performing general purpose, medical evacuation, medical treatment, command-and-control and mortar carrier roles.

Potential alternatives to meet AMPV mission requirements include Stryker, mine-resistant ambush-protected (MRAP), Bradley derivatives, and other nondevelopmental systems, and/or variants of DoD development programs such as the ground combat vehicle. A subsequent decision will address replacement of M113 vehicles in other than HBCT formations.

AMPV will integrate current M113-series MEPs and provide for integration of future radio and network systems as well as improved medical equipment packages fielded on MRAP ambulances.

AMPV is aimed to provide production vehicles and be first unit equipped no later than FY 2017.

Product Manager Mounted Maneuver

The **M113 Family of Vehicles** (FoV) provides a highly mobile, survivable and reliable tracked-vehicle platform that, with upgrades, is able to keep pace with Abrams- and Bradley-equipped units and is adaptable to a wide range of current and future battlefield tasks through the integration of specialized mission modules. Although not presently in production, the more than 10,000 M113 FOV systems in Army vehicle inventories constitute a significant percentage of present and future heavy division assets.

The latest A3 models provide various derivatives within the FoV with major performance improvements in mobility, reliability and survivability through installation of a 275-hp 6V53T engine with an X-200-4A transmission. Coupled with reconfiguration of the driver's station and several other vehicle subsystems, these improvements provide battlefield mobility commensurate with the supported Abrams/Bradley maneuver force and permit a range of enhanced survivability options.

The **M88A2 Heavy Equipment Recovery Combat Utility Lift and Evacuation System** (HERCULES) is a fully tracked, heavy armored vehicle developed to accomplish safe, effective and independent battlefield recovery operations. It implements swift and effective combat evacuations through the battlefield recovery operations of towing, winching and lifting. The Hercules is the primary recovery support for the 70-ton M1 Abrams tank, the Wolverine and other heavy combat vehicles.

The M88A2 includes a 1,050-hp engine; a 35-ton boom; overlay armor; a 140,000-pound, single-line, constant-pull main winch; and a 3-ton auxiliary winch for deploying the main winch cable. When compared with the M88A1, these upgrades improve towing power by 25 percent, lifting capability by 40 percent and winching ability by 55 percent. The system is in full-rate production and deployment. Fielding began in July 1997.

M1064 Self-propelled 120 mm Heavy Mortar Carrier

Product Manager Self-Propelled Howitzer Systems

Product Manager Self-Propelled Howitzer Systems manages approximately 1,934 platforms, including the **M109A6 Paladin/M992A2 Field Artillery Ammunition Supply Vehicle (FAASV)** system, the Paladin/Carrier Ammunition Tracked (CAT) and Paladin Integrated Management (PIM) program vehicles.

Paladin/FAASV. The M109A6 Paladin 155 mm self-propelled howitzer provides the primary indirect fire support to modular HBCTs and armored cavalry regiments. Like the earlier M109 models, the M109A6 Paladin is a fully tracked, armored vehicle. The enhanced Paladin configuration is achieved through extensive modifications to existing M109A2/A3 vehicle hulls and the subsequent introduction of an entirely new turret structure.

The Paladin includes an onboard Paladin Digital Fire-Control System (PDFCS), a vehicle location/navigation system, secure radio communications systems, an improved M284 cannon and M182A1 gun mount, automotive improvements, improved ballistic and nuclear-biological-chemical protection, driver's night-vision capability, and built-in test equipment. Additional chassis upgrades include a remotely actuated travel lock (for quicker site occupation and displacement), longer torsion bars (to help

M109A6 Paladin Howitzer

upport the new turret) and a low-heat re-ection engine with an improved cooling ystem. The Paladin has improved respon-iveness, survivability, lethality and reliabil-ty compared with the earlier M109s.

A parallel U.S. Army recapitalization ef-ort was seen in the **M992A2 FAASV**. The asic M992A0 FAASV emerged from an in-lustry research and development project lesigned to provide self-propelled field ar-illery units with a ballistically protected ehicle capable of performing critical re-upply and support functions. The FAASV ystem was type classified and entered roduction in 1983. It was based on an 1109 howitzer chassis that provided the esupply asset with mobility and surviv-bility characteristics commensurate with ne supported cannon element. The system s paired on a one-for-one basis with the rmy's M109A6 Paladin self-propelled owitzer.

Paladin/FAASV Integrated Management PIM/CAT). The PIM program is a modern-ation program engineered to improve eadiness, avoid components' obsolescence nd increase sustainability of the M109A6 aladin and the M992A2 FAASV platforms rough the year 2050. PIM will leverage eet commonality for key components in-uding the Bradley engine, transmission, fi-al drives and suspension. PIM uses the ex-ting M109A6 main armament and recently esigned cab structure while replacing out-oded chassis components with advanced mponents from the Bradley fighting vehi-e to increase sustainability and commonal-y across the HBCT. PIM also incorporates lect technologies from the non-line-of-ght cannon (NLOS-C), including a (modi-ed electric) projectile rammer and modern ectric-gun drive systems to replace the rrent hydraulically operated elevation d azimuth drives that were designed in e early 1960s.

The M109 FoV platforms will be fitted ith Blue Force Tracker capability to en-re compatibility with future architec-tures. These upgrades and better communications technology will significantly improve operational awareness on the battlefield and reduce the logistics footprint within the HBCT. The new electric-gun drives and rammer components, as well as a microclimate air conditioning system, will be powered by the common modular power system (CMPS). Once delivered to the field, the PIM vehicles will give HBCT commanders a more sustainable vehicle, providing commanders with increased confidence in their artillery fleet.

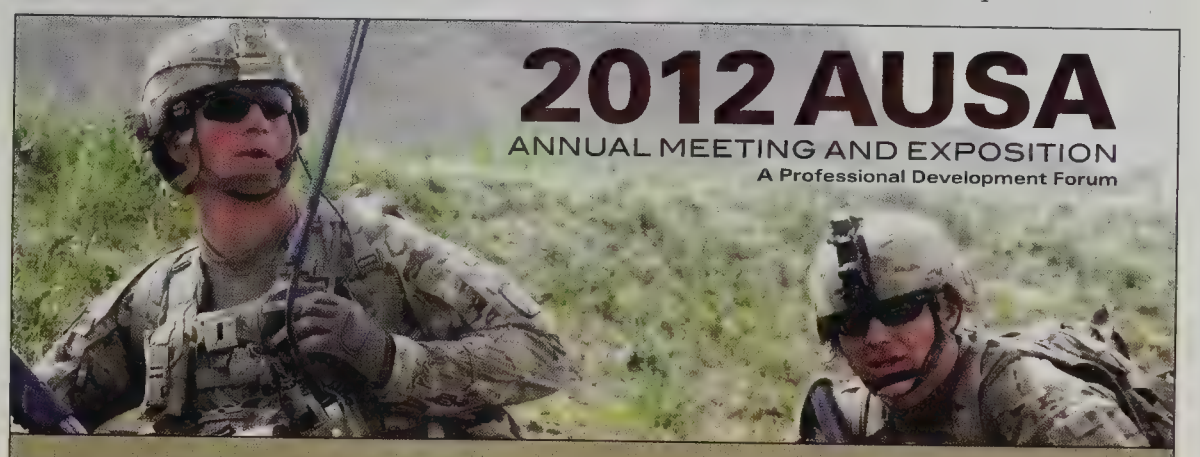
Project Manager Stryker Brigade Combat Team

The **Project Manager Stryker Brigade Combat Team (PM SBCT)** develops, produces and sustains the full range of safe, reliable, supportable and effective Stryker vehicle systems—a diverse fleet of medium-weight vehicles capable of being rapidly deployed to trouble spots around the world.

Stryker Family of Vehicles. The Stryker FoV consists of 10 unique mission equipment packages incorporated into the eight-wheeled, common combat vehicle platform configurations.

The Army's responsibility to satisfy 21st-century requirements for effective full spectrum operations required an improved capability for the rapid deployment of highly integrated combined arms forces, possessing overmatch capabilities, exploiting the power of information and human potential, and combining the advantages of both light and mechanized forces across the full range of military and nonmilitary operations. As a result, the Army invested in the Stryker FoV.

In 2000, the Stryker became the first new combat vehicle to be acquired by the Army in more than 20 years. The procurement of



Save Time and Register Online

- Go to **www.ausa.org** and click on the small Annual Meeting image or the Annual Meeting link
- Fill out the registration form and click "Submit"
- Print your confirmation with your personalized bar code
- Bring this with your government-issued photo ID to the Registration Desk to pick up your badge

See you there!

22-24 OCTOBER 2012 • WASHINGTON, D.C.

ASSOCIATION OF THE UNITED STATES ARMY
2425 Wilson Boulevard • Arlington, VA 22201
(703) 841-4300 • (800) 336-4570 • www.ausa.org

the Stryker emerged following the challenge presented in 1999 by then-U.S. Army Chief of Staff GEN Eric K. Shinseki: "We must provide early entry forces that can operate jointly without access to fixed forward bases, but we still need the power to slug it out and win decisively."

Strykers have accumulated more than 30 million combat miles in Operation Enduring Freedom and Operation Iraqi Freedom. There are 10 Stryker variants.

The M1126 infantry carrier vehicle (ICV) is a troop transport vehicle capable of carrying nine infantry soldiers and their equipment and requires a crew of two—a driver and a vehicle commander. The ICV is armed with a remote weapons station that supports the M2 .50-caliber machine gun or the Mk 19 automatic grenade launcher, the M6 countermeasure device (smoke grenade launcher) and an integrated thermal weapon sight. The other nine variants consist of the M1130 commander's vehicle, the M1127 reconnaissance vehicle (RV), the M1131 A1 fire support vehicle, the M1129 A1 mounted mortar carrier, the M1134 antitank guided missile vehicle, the M1132 engineer squad vehicle, the M1133 medical evacuation vehicle and the M1135 nuclear-biological-chemical reconnaissance vehicle. The M1128 mobile gun system is based on the ICV but modified to incorporate a 105 mm turreted gun, an autoloader system and a crew of three.

The addition of the double-V hull (DVH) provides improved blast protection for the Stryker crew and is currently being fielded in Afghanistan. Based on the unique operating environment encountered in Afghanistan, DVH ICVs (ICVVs) were provided in lieu of DVH RVs because the ICVV's remote weapon station afforded greater protection and lethality and carried more personnel. To continue to perform scout missions, a kit was developed that will facilitate the installation of the RV's unique mission equipment package into ICVVs.

The Stryker supports communications suites that integrate the single-channel ground-and-air radio system (SINCGARS) radio family; enhanced position location reporting system (EPLRS); Force XXI Battle Command Brigade and Below (FBCB2) or Blue Force Tracker (BFT); GPS; high-frequency (HF) and multiband very high frequency (VHF/UHF) radio systems; and computer workstations using Command Post of the Future software.

U.S. Navy/MC1 Daniel N. Woods

M1126 Stryker Infantry Carrier Vehicle (ICV)

Ground Combat Vehicle Project Management Office (GCV PMO)

The **Ground Combat Vehicle**, managed by PM GCV, is part of the Army's combat vehicle modernization strategy, second only to the Network. The GCV Program's objective is to develop and deliver an affordable and effective infantry fighting vehicle by focusing on affordability and program risk reduction through the use of mature technology and prudent performance trades. The Army is executing a three-pronged strategy, now in the technology development phase, that uses contractor-developed, best-value designs; technical and operational studies of existing vehicle platforms; and continued analysis of existing alternatives to assess GCV requirements against cost and schedule. An update to the analysis of alternatives, informed by contractor design work, will be ongoing during the technology development phase. This prong will enable the Army to make informed, timely requirements trades. The Army is conducting a technical and operational analysis of existing nondevelopmental vehicles. The effort from this prong will validate existing capabilities against the ground combat vehicle requirements and further inform potential design trade-offs. As the Army approaches milestone B, the assessments of technical achievability, existing vehicle platform capabilities, refined cost estimates and potential affordability tradeoffs will significantly inform potential adjustments to the GCV's requirements.

The need for GCV is driven by compelling current and emerging threats and a critical need for better force protection. Soldier input, informed by 10 years of war, clearly identifies an ever emerging threat and requirement for an infantry fighting vehicle that can deliver a full, nine-soldier squad to the battlefield in an improvised explosive device (IED) environment under armor. No single vehicle that is available today can provide that combination of capabilities.

Robotic Systems Joint Project Office (RS JPO)

The Robotic Systems Joint Project Office takes a joint Army and Marine Corps perspective in managing the development, acquisition, testing, systems integration, product improvement and fielding of robotic systems that will form the backbone of the Combat Force of the Future. RS JPO manages the MARCbot, the M160 Anti-Personnel Mine Clearing System, the PackBot family of systems, the TALON family of systems, and the small unmanned ground vehicle (SUGV) family of systems, which includes the mini-explosive ordnance disposal (EOD) and the XM1216.

The **Multi-function, Agile, Remote Controlled Robot (MARCbot)** is a commercial off-the-shelf (COTS) manportable, relatively low-cost, tele-operated, wheeled robotic platform. The system includes a mast-mounted color video camera, a radio transmitter and an operator control unit. The camera mast can be raised up to 45 inches. The four-wheel-drive independent suspension allows maneuverability over relatively rough terrain including curbs up to 4 inches tall. In 2008, the system was upgraded to replace the separate control and video radios with a single digital radio. The custom suitcase-sized controller was replaced with a common, ruggedized notebook personal computer and game-style handheld controller. The MARCbot has been fielded since 2004 with more than 850 robots deployed.

The **M160 Anti-Personnel Mine Clearing System, Remote Control**, is a 6-ton, tracked robot designed for tele-operation

from either mounted or dismounted positions to perform area clearance of antipersonnel mine-sown areas. The M160 detonates or destroys antipersonnel mines in a 66-inch wide path through the action of a rotating chain and hammer flail system. It fills the light flail mission in the area clearance family of systems.

Because it's a program-of-record robot, system improvements are implemented via an engineering change process. Multiple engineering change proposals have been approved and integrated into the M160 design to enhance the robot's utility for the soldier or marine. These improvements include transportability certification, software version updates to allow vehicle maintainers to troubleshoot and isolate causes of failures at the vehicle control panel, and updated marking requirements.

The M160 was originally procured as a COTS item but has made the transition to a program of record and is currently in production.

The **PackBot** is a COTS, small, tele-operated, tracked robotic platform. The system is modular and easily reconfigured. Basic mission packages include an articulated arm with a gripper, a color surveillance camera with ultra low-light and zoom capabilities, and a rugged game-style controller for the common, ruggedized laptop operator control unit. Two different styles of manipulator arms are available within the PackBot family. The first is a small arm manipulator with 42-inch extension and a lifting capacity of 5 pounds throughout the full range of motion. The second is a three-link arm that can extend 80 inches and lift 10 pounds close to the chassis and 10 pounds at full extension.

Multiple variants of the PackBot have been fielded, including the PackBot 500 explosive ordnance disposal, PackBot 500 IDO chemical sniffer, and PackBot 510 asTac. A recent software upgrade on the ackBot 510 platform enhances plug-and-lay interoperability of all 500 and 510 series payloads on the FasTac chassis.

More than 1,900 PackBot family robots ave been supporting operations in theater.

The **TALON Family of Systems** is a OTS, vehicle-transportable, tele-operated, multi-terrain tracked system that has ne operational flexibility for a variety of issions. The TALON provides standoff rotection during remote reconnaissance nd surveillance. The gripper attached to ne control arm can support explosive ordance disposal as well as additional engiеer support activities that may not involve terrogation of improvised explosive deces. The systems include three cameras nd a modular design that allows for plugnd-play upgrades.

The TALON family of systems has undergone various improvements through ser feedback to enhance operator protection, system endurance, camera resolution, situational awareness, radio communication, and mission data storage. Additional improvements being developed and evaluated include an increase in manipulator arm dexterity, improved communication range in urban and covert scenarios, and increased drive motor torque to improve system mobility.

XM1216 Small Unmanned Ground Vehicle

The TALON family is supporting soldiers and marines with explosive ordnance disposal, route clearance engineer support, and reconnaissance and surveillance missions. Approximately 800 TALON systems were fielded to Operation Enduring Freedom and Operation New Dawn. Approximately 450 systems are supporting various training requirements in the United States and abroad.

The **XM1216 Small Unmanned Ground Vehicle (SUGV)** is a program of record, tele-operated, manportable, tracked robotic vehicle capable of conducting six-hour missions in urban areas, tunnels and caves. The SUGV provides situational awareness, intelligence, surveillance and reconnaissance to dismounted soldiers, enabling the performance of manpower-intensive or high-risk functions without exposing soldiers directly to threats. The SUGV can climb stairs, negotiate 10-inch vertical obstacles, and traverse slopes and austere terrain. The modular design allows multiple payloads to be integrated in a plug-and-play fashion.

During FY 2010, 52 design improvements were implemented. Final XM1216 SUGV baseline configuration increased capabilities include: enhanced radio for secure communications at greater distances; improved electro-optical and infrared cameras in the head assembly for improved long-range night-vision performance; laser rangefinder to provide target location by grid coordinates; enhanced manipulator arm; fiber optic tether spooler; chemical, biological, radiological and nuclear detector; and an embedded tactical engagement simulation system.

The SUGV is currently in low-rate initial production.

The **Mini-EOD** (SUGV310) is a COTS, lightweight, manportable, tracked robotic vehicle. The Mini-EOD is composed of a manipulator arm with camera, lights, and a chassis with four drive cameras. The user wears a monocle over one eye to see what the robot sees and operates the vehicle with a small handheld device similar to that used in common gaming systems, both attached to a wearable operator control unit.

The Mini-EOD can navigate over various types of terrain including rocky, sandy and uneven surfaces, and the low-light capabilities enable it to perform during both day and nighttime operations. The pivoting manipulator arm is capable of extending up to 2 feet and can lift up to 15 pounds close in and 7 pounds fully extended.

RS JPO utilizes feedback from units using the Mini-EOD in theater and U.S. training sites to develop enhancements and solutions for improved performance, reliability, and operational effectiveness for the soldier or marine.

As a result of a joint urgent operational needs statement, more than 400 Mini-EOD robots have been fielded in support of combat operations by all branches of the military.

COMBAT SUPPORT AND COMBAT SERVICE SUPPORT

The **Program Executive Office for Combat Support and Combat Service Support (PEO CS&CSS)** directs and coordinates the efforts of project and product managers/product directors managing more than 350 Army systems, including several joint service programs, across all phases of their life cycles. Its core competency lies in the life-cycle management of the Army's force projection equipment, joint combat support systems, mine-resistant ambush-protected (MRAP) vehicles, and tactical wheeled vehicles. Striving to be agile for changes in missions, threats and technologies, its highly skilled workforce provides program management and acquisition excellence in order to get urgent and combat-ready equipment to soldiers. PEO CS&CSS is committed to supporting the goals and performance of joint and expeditionary forces, ensuring affordable products are available to support current and future warfighters.

Program phases fall into the areas of: pre-systems acquisition (concept refinement or technology development), generally consisting of research and development programs and before Milestone B; systems acquisition (between Milestone B and full materiel release); systems after full materiel release (in production and fielding phases); and two types of sustainment (operations and support)—systems that have completed fielding, are no longer in production and are managed directly by the Project Manager (PM), and systems that have completed fielding, are no longer in production and are managed by an Army Materiel Command commodity command, but for which the PM is the life-cycle manager.

While some project and product manager realignment is scheduled for fiscal year (FY) 2013, a representative sampling of current programs follows.

Project Manager Force Projection

The **Project Manager Force Projection (PM FP)** encompasses the Product Director Army Watercraft Systems (PD AWS), Product Manager (PM) Bridging, Product Manager Combat Engineer/Material Handling Equipment (PM CE/MHE), Product Manager Force Sustainment Systems (PM FSS), and Product Manager Petroleum and Water Systems (PM PAWS).

Product Director for Army Watercraft Systems

The **Product Director for Army Watercraft Systems (PD AWS)** is committed to developing, acquiring, fielding and sustaining highly capable equipment that meets emerging watercraft requirements. The Army watercraft community provides a variety of systems and platforms that operate in geographical environments bounded, influenced, and accessed by ports, littorals and waterways. AWS provides critical capabilities that support full spectrum land-combat operations by extending the ground commander's available maneuver space. These functions include the capability to conduct amphibious and riverine operations, and providing logistics support to joint operations and campaigns including joint over-the-shore operations and intratheater transport of time-sensitive, mission-critical personnel and materiel. The watercraft solutions documented in the current AWS strategy are designed to provide the capability to maneuver in all tactical and operational environments; to rapidly switch between operations, missions and engagements; to support decentralized forces; and to rapidly deploy and sustain forces, equipment and materiel to multiple locations worldwide. Efforts to develop Army watercraft capability for the future will focus on the creation and maintenance of an Army watercraft portfolio that delivers the speed, agility and operational payload needed to maneuver operationally ready forces and provide commanders with the ability to deliver combat power at the time and place of their choosing.

The **Logistics Support Vessel (LSV)** provides worldwide transportation of combat vehicles and sustainment cargo. The 313-foot LSV class vessel, designed to carry 2,280 tons of deck cargo, has a beam of 60 feet and a molded depth of 19 feet. It provides intratheater movement to remote, underdeveloped coastlines and inland waterways. The LSV is the Army's primary joint logistics over-the-shore (JLOTS) vessel; it also assists in unit deployment and relocation. The LSV fleet service life extension program includes changes to command, control, communication, computers, intelligence, surveillance and reconnaissance (C4ISR) and integrated bridge systems; hull and engineering systems; and force protection upgrades, as well as improvements to crew messing, living spaces and deck equipment.

Logistics Support Vessel (LSV)

The **Landing Craft Utility (LCU) 2000** provides worldwide transport of combat vehicles and sustainment cargo. It also supports intratheater and tactical resupply. The LCU 2000 has a length of 174 feet, beam of 42 feet and loaded draft of 9 feet, and it can carry 350 tons of deck cargo. The LCU 2000 fleet is nearing completion of a C4ISR upgrade, which provides state-of-the-art communication equipment, navigational equipment and safety of life-at-sea electronics, and a service life extension program that will include power train and force protection upgrades.

The **Large Tug (LT) 128'** is used for trans-ocean/coastal towing operations and for assisting with the docking/undocking of large ships. The LT 128' is outfitted to provide salvage, rescue and firefighting assistance to other vessels and shore installations on a limited basis. The LT 128' fleet recently completed an extensive modification program, which included lowering the pilothouse and upgrading the fuel tank systems and bow fendering.

The mission of the **900 Class Small Tug (ST)** is moving logistical supplies and equipment in harbor and inland waterways. The small tug also provides the capability to assist larger tugs in docking and undocking all types of ships and watercraft and can be used in routine harbor utility work.

The **Landing Craft Mechanized (LCM8)**, used in utility work, features a specialized Mod 2 program. This provides additional capabilities of command and control, personnel transfer and light salvage.

The **Modular Causeway System (MCS)** provides a means of moving cargo from ship to shore across unimproved beaches in areas of the world where fixed port facilities are unavailable, denied or otherwise unacceptable. MCS sections are modular, International Standardization Organization (ISO)-compatible modules. Four configurations are derived from basic modules: roll-on/roll-off discharge facility, causeway ferry, floating causeway (FC), and the warping tug.

The **Barge Derrick (BD) Crane 115-ton** is used primarily for discharging heavy loads beyond the capacity of a ship's gear and assisting in salvage operations. The crane pro-

vides the lift and reach needed to discharge the heaviest of the projected Army cargo—the M1A2 main battle tank—from the centerline of the large ships.

With an understated motto of "Sail Army," the Product Director for Army Watercraft Systems (PD AWS) provides "a flexible and responsive fleet, projecting and sustaining America's forces through the 21st century."

Product Manager Bridging

The **Product Manager (PM) Bridging** is committed to develop, acquire, field and sustain gap-crossing solutions that meet the soldier's requirements. PM Bridging interfaces with other defense organizations on a range of existing and emerging bridging systems, including the Wolverine Heavy Assault Bridge (HAB), Armored Vehicle Launched Bridge (AVLB), Improved Ribbon Bridge (IRB), Bridge Erection Boat (BEB), Common Bridge Transporter (CBT), Rapidly Emplaced Bridge System (REBS), Dry Support Bridge (DSB) system, M3 Medium Girder Bridge (MGB), Joint Assault Bridge (JAB), Assault Breacher Vehicle (ABV), Improved Boat Cradle (IBC), Bridge Adapter Pallet (BAP) and Line of Communication Bridge (LOCB). The Dry Support Bridge system and the Improved Ribbon Bridge provide representative examples.

The **Dry Support Bridge (DSB)** provides the Army with assault and support bridging for gaps of up to 40 meters, with testing under way to increase the length to 46 meters. The DSB replaces the outdated, manpower- and time-intensive medium girder bridge with a mechanical system capable of emplacing a 40-meter bridge with eight soldiers in 90 minutes or less. In addition, the DSB will improve current bridge load-carrying capacity, moving it up to military load classification 96 for wheeled traffic, such as a fully loaded heavy equipment transporter. The DSB is designed for transportation as a palletized load by the CBT, palletized load system (PLS) trailers or by service support units equipped with PLS trucks.

Assault bridging and gap crossing are supported by the **Assault Breacher Vehicle (ABV)**, which provides an in-stride complex obstacle-breaching capability based on the M1A1 Abrams tank hull for heavy brigade combat teams. The **M104 Wolverine Heavy Assault Bridge** system is a legacy bridge system using the M1A2 SEP platform to horizontally launch and recover a 26-meter bridge while under armor. Before the program was terminated in 2000, low-rate initial production systems were procured. The **Joint Assault Bridge (JAB)** program will provide an M1A1-based platform to launch and recover the legacy armored vehicle launched bridge (AVLB) scissor bridge and replace AVLB launchers in combat engineer units. The **Rapidly Emplaced Bridge System (REBS)** provides

High-Mobility Engineer Excavator (HMEE-I)

bridging capability to Stryker BCTs.

A recently emerging requirement to provide the Infantry brigade combat team (IBCT) with the capability to conduct assault gap crossing is the **Light Assault Gap Crossing Capability (LAGCC)**. The LAGCC will address three capability gaps. The Type I Bridge will be a footbridge that addresses an urgent need for assault/tactical gap-crossing capability for dismounted soldiers in IBCTs. The Type II Bridge will provide a crossing capability up to 8 meters while mounted on a vehicle organic to the IBCT. The Type III Bridge will provide a combination assault rafting/assault wet gap-crossing capability that can be used in full spectrum operations. The requirements documents for these capabilities are currently under development.

Product Manager Combat Engineer/ Material Handling Equipment

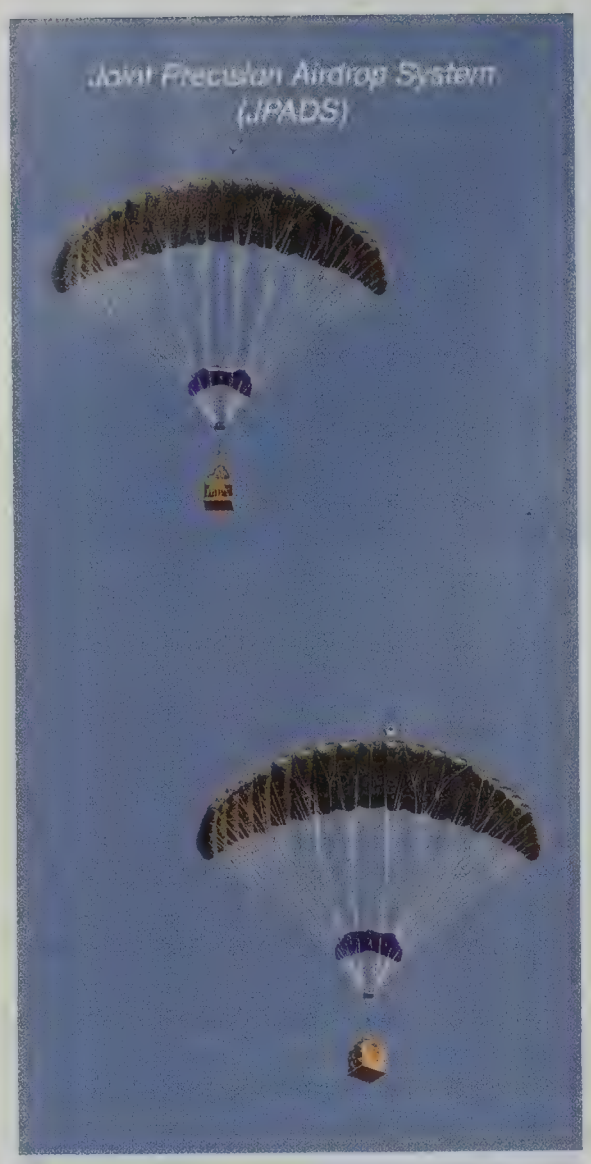
The **Product Manager Combat Engineer/Material Handling Equipment (PM CE/MHE)** coordinates and supports a wide range of combat engineer and material handling equipment. Program examples include new systems like the High-Mobility Engineer Excavator, Engineer Mission Module-Water Distributor, Paving Machine, Backhoe Loaders, Hydraulic Excavators, Light and Medium Dozers, Light and Heavy loaders, Grader, Asphalt Mixing Plants, Route Remediation Equipment, Enhanced Rapid Airfield and Construction Capability, Route Clearance and Interrogation Systems, and Skid Steer Loaders. These programs support the current engineer forces within Stryker, heavy and Infantry brigade combat teams, engineer support companies, vertical and horizontal companies, asphalt and concrete teams, and multirole bridge companies. PM CE/MHE also supports the Transportation, Quartermaster, Medical, Aviation, and Military Police Corps.

The **High-Mobility Engineer Excavator (HMEE-I)** is a nondevelopmental, military-unique vehicle that is fielded to the Army's brigade combat teams and other selected engineer units, replacing the Small Emplacement Excavator (SEE), whose life cycle ended in FY 2005. The high mobility of the HMEE-I provides an earth-moving machine capable of maintaining pace with the Army's current and future combat systems. The HMEE-I is a diesel-engine-driven, self-propelled, four-wheel-drive vehicle with a hydraulically operated, front-mounted loader bucket and a hydraulically operated, rear-mounted backhoe bucket. The HMEE-I has a 1.5-cubic yard front-loader bucket, a 0.28-cubic yard backhoe bucket, a 14-foot digging depth and a climate-controlled cab. The HMEE-I was designed to maintain pace with maneuver units and has a top speed of 60 mph.

Another representative activity with a broad range of engineering applications involves the development of **Engineer Mission Modules**. Permanently mounted on standard palletized load system flatracks, the modules are loaded via truck load-handling equipment, which allows drivers to configure their vehicles for a specific mission. By using fewer trucks and more modules, the concept provides a cost-effective means of modernizing the fleet of engineer construction equipment. PLS flatrack configurations in production include the M5 bituminous distributor, which has a capacity of 2,800 gallons; the M6 concrete mobile mixer, which has a capacity of 5 cubic yards when used on the PLS truck or trailer and 8 cubic yards when used on the ground as a batch plant; and the M6 dump body, which has a capacity of 12 to 14 cubic yards. Currently under development are the XM9 2,000-gallon water distributor for use with the Heavy Expanded Mobility Tactical Truck Load Handling System (HEMTT-LHS) and the XM10 3,000-gallon water distributor for use with the PLS truck. Other modules being considered include a well-drilling system and a chemical decontamination unit.

Product Manager Force Sustainment Systems

The **Product Manager Force Sustainment Systems (PM FSS)** has life-cycle management responsibility for cargo aerial delivery equipment, field feeding and field services systems, Force Provider base camp, and shelter systems consisting of shelters, heaters and camouflage netting.



The **Joint Precision Airdrop System (JPADS)** is a family of systems. The Joint Precision Airdrop System 2,400 pounds (JPADS 2K) has been type classified and is presently being fielded to authorized units. It allows conventional military aircraft to accurately drop munitions and/or a huge range of supplies onto the battlefield while minimizing the risk to aircraft and the possibility of enemy detection of aircraft drop zones. The systems use gliding parachute decelerators, global positioning system (GPS)-based guidance, navigation and control, weather data assimilation, and an airdrop mission-planning tool to deliver cargo with near-pinpoint accuracy. The first combat JPADS cargo airdrop took place at the end of August 2006. Based upon theater feedback, increased capabilities are being incorporated to reduce the retrograde burden, provide terrain avoidance and provide even greater accuracy. The Joint Precision Airdrop System 10,000 pounds (JPADS 10K) has completed operational testing and will be type classified in FY 2012. JPADS 10K production is expected to start in FY 2013.

The **Low Cost Aerial Delivery System (LCADS)** is another family of aerial delivery products that are on the opposite end of the technology spectrum compared with JPADS. By means of simplified designs and use of commercially available low-cost materials, PM FSS has fielded an array of expendable parachutes and containers. These parachute and container assemblies are a cost-effective means of either battlefield resupply or humanitarian aid. Purpose-built for one-time use, these items are uniquely suited for employment in the combat environment, where the recovery of aerial delivery equipment is either impractical or puts warfighters at risk. At 50 percent less cost than legacy aerial delivery equipment, LCADS provides tangible savings. In addition, because LCADS parachutes come prepacked from the manufacturer, there is no need for skilled parachute riggers to maintain this equipment. The LCADS Low Velocity version is currently the highest demand cargo parachute for theater, with recent user demand averaging 5,000 units per month. LCADS delivered 86 million pounds of supplies in 2011 to units in Operation Enduring Freedom.

The **Multi-Temperature Refrigerated Container System (MTRCS)** provides the capability to transport and store refrigerated and frozen products in a single container. The MTRCS will be used by quartermaster subsistence platoons at corps level and brigade combat teams to support ration distribution and storage. The MTRCS consists of an insulated 8-foot by 8-foot by 20-foot ISO container with an engine-driven refrigeration unit that will allow operation on the move. Two compartments inside the container are separated by a moveable partition, allowing the container to be tailored to the specific load. The result is more efficient space utilization and reduced transportation requirements. The MTRCS is constructed to interface directly with the HEMTT-LHS for transport. Fielding of the MTRCS was initiated in September 2010, and 100 were issued in Afghanistan to support remote bases.

The **Mobile Integrated Remains Collection System (MIRCS)** is transforming mortuary affairs operations by providing a system that is responsive, deployable, agile, versatile and sustainable. The MIRCS provides a mobile facility for the initial processing and storage of human remains on the battlefield. It is a self-contained, expandable, ISO-compatible shelter with a receiving/processing area, administrative area, refrigerated storage for 16 remains and storage for operational supplies. It has an onboard power generator, environmental control, wastewater storage, and all components necessary to deploy, move, and operate in support of the full spectrum of military and peacetime disaster support operations. The MIRCS is constructed to interface directly with the HEMTT-LHS for transport. Fielding of the MIRCS was initiated in September 2010, and two are deployed in Afghanistan.

In response to the needs of the warfighter and combatant commanders, the **Force Provider Base Camp System**, initially developed as a deployable rest and recreation system, has been repurposed into an expeditionary **Force Provider-Expeditionary** base camp for sustainment of the soldiers on the front lines, becoming affectionately known as the Army's home away from home. The expeditionary configuration features a 600-person module in component sets that can be divided into four equal company-size submodules. It incorporates the use of an air-beam-supported tent, extendable, modular personnel (TEMPER) shelter, and TRICON-based hygiene, laundry and feeding systems. The four equal submodules enable the commander to deploy 150 personnel to four separate locations without sacrificing any capability. This gives the commander greater flexibility in deciding where to base combat power. The air-beam TEMPER shelters make setting up the billeting and administration tents easy, reducing the time it takes to establish an entire 600-person camp from weeks to just a few days. The tent's air beams are inflated with an air compressor, similar to filling an automobile tire with air; it takes less than 30 minutes to set up each tent. In addition, other recently incorporated features provide the ability to transport by air all necessary equipment for a complete 150-person camp in a single C-17 aircraft, and, after reaching its final destination, the submodule can be fully operational in less than four hours with a trained crew of eight personnel, providing quality latrine, shower, laundry, billeting and feeding facilities for soldiers.

PM FSS has sponsored and initiated a collaborative effort to explore off-the-shelf solutions and emerging technologies that could be deployed immediately to improve the energy, water, and waste efficiency and reduce environmental risks of life support areas outfitted with Force Provider modular equipment sets at tactical small-unit base camps. Specific areas of focus include improved environmental liners and shade for shelters, energy-efficient rigid wall shelters, wastewater treatment and reuse, smart power distribution, and waste-to-energy systems.

The Army's **Base Camp Systems Integration Laboratory (SIL)**, managed and operated by PM FSS, will enable the Army and the joint services to evaluate future technologies in a live warfighter environment, providing solutions to reduce the energy demand and logistical burden on base camps in Afghanistan. The 4-acre SIL, located at Fort Devens, Mass., is fully instrumented to measure water, fuel and power usage, forging the path for increased energy efficiency and base camp commonality. Improving our warfighters' quality of life and better facilitating the mission of units at base camps are just two of the SIL's objectives.

Product Manager Petroleum and Water Systems

The **Product Manager Petroleum and Water Systems (PM PAWS)** is responsible for a range of petroleum laboratories, petro-

leum storage and distribution systems, water purification and treatment systems, and water storage and distribution systems.

The **Petroleum Quality Analysis System-Enhanced (PQAS-E)** is a fully integrated fuel laboratory installed in an environmentally controlled ISO shelter, mounted on an XCK2000E1 trailer with support equipment, supplies and a tent. The PQAS-E is a complete petroleum laboratory capable of B-2-level testing on kerosene-based and diesel fuels. System software provides an information database/expert system for the technician to consult in interpreting test results and in making recommendations for the disposition of fuels. The PQAS-E features an internal data acquisition system on a stand-alone computer that outputs a comprehensive hard-copy test report showing the result and the acceptable range for each test. The tent structure serves as a customer service area where samples can be received, logged and stored before processing.

The **Modular Fuel System (MFS)** is a key enabler for petroleum distribution operations in the modular force brigade combat teams and support brigades and was developed specifically for use with the palletized load system and HEMTT-LHS. The MFS capitalizes on PLS/LHS enhanced mobility, speed of download and multicommodity capabilities. The flexibility of the MFS, which includes 14 ISO-certified, 2,500-gallon capacity tankrack modules (TRM) and two 600-gallon-per-minute pumprack modules (PRM), allows for multiple modes of operation to distribute fuel. The MFS is a rapidly deployable and recoverable fuel storage/distribution system able to receive, store and issue fuels on the battlefield. The system has a 35,000-gallon capacity and can be manifolded and placed into operation in one hour or less using four trained 92F personnel. It can also be disassembled and packed for transport in one hour or less. Each TRM has onboard storage compartments for hoses, nozzles, fire extinguishers and grounding rods. Each PRM has a diesel-engine-driven centrifugal pump, filter separator, sufficient hoses, refueling nozzles, valves, fittings and an auxiliary pump for gravity discharge operations, and fittings to establish eight retail and/or bulk dispensing points (total of 16 points per system). The system can also be fitted with a fuel additive injector. The Army does not have legacy storage/distribution systems that can compare to the increased mobility, capability, compatibility, maintainability, sustainability and performance of the MFS. The TRM can also be used in conjunction with the HEMTT tanker. This configuration enables brigades to carry and distribute their required fuel supply while minimizing personnel and prime movers.

The **Fuel System Supply Point (FSSP)** consists of fabric storage tanks of various sizes, pumps, filter separators, fittings and hoses. The systems are containerized in ISO-compatible modules. The FSSP is the primary system for receiving, storing and issuing fuel within a theater of operation. The system configuration can be tailored to situational requirements. The FSSP has the flexibility to provide storage and delivery of fuel for a few thousand to hundreds of thousands of gallons. It is capable of rapid emplacement and recovery and can be transported to the operational site by a wide variety of transportation assets.

The **Load Handling System Compatible, Water Tank Rack (Hippo)** represents the latest technology in bulk water distribution systems. The system is a mobile hard-wall system providing potable water to theater and brigade units. The Hippo consists of a 2,000-gallon water tank rack with pump, filling stand, and a 70-foot hose reel with bulk suction and discharge hoses. It is fully functional mounted or dismounted and is transportable when full, partially full or empty. The Hippo prevents water from freezing at minus 25 degrees Fahrenheit and is compatible with the HEMTT-LHS and the PLS truck and trailer. The Hippo replaces the Semi-trailer Mounted Fabric Tank (SMFT). It provides the Army with the capability to receive, store and distribute potable water for cooking, drinking, showers and cleaning purposes.

The **Unit Water Pod System (Camel II)** system consists of an 800- to 900-gallon storage capacity tank, heater unit, government-furnished M1095 medium tactical vehicle trailer, and contractor-developed components mounted to or carried by the trailer. Under the Stryker brigade combat team (SBCT) concept, the Camel II will provide a maneuver unit with a one-day-supply of potable water for drinking and other purposes. If the unit has another source of drinking water, such as bottled water, the Camel II can provide two days of supply of potable water for other purposes. The Camel II is the unit's primary water distribution system and will be used by units at all echelons throughout the battlefield, replacing the M107, M149 and M1112 series 400-gallon water trailers (Water Buffalo).

Project Manager Joint Combat Support Systems

The office of Project Manager Joint Combat Support Systems (PM JCSS) includes the Project Manager Armored Security Vehicle (PM ASV); Product Manager Sets, Kits, Outfits and Tools (PM SKOT); Product Director Test, Measurement and Diagnostic Equipment (PD TMDE); Product Director Horizontal Technology Insertion (PD HTI); and Product Director Non-Standard Vehicles (PD NSV).

Product Manager Armored Security Vehicle

The **Product Manager Armored Security Vehicle (PM ASV)** has the mission to develop, produce, field and sustain the **M1117 Armored Security Vehicle (ASV)** to an expeditionary force. The M1117 ASV is a turreted, armored, all-wheel drive vehicle that supports military police missions—such as rear-area security, law and order operations, battlefield circulation and enemy prisoner of war operations—over the entire spectrum of war and operations other than war as well as convoy protection missions.

The ASV provides protection to the crew compartment, gunner's station and the ammunition storage area. The turret is fully enclosed, with both an Mk 19 40 mm grenade machine gun and a .50-caliber machine gun, and a multisalvo smoke grenade launcher. The ASV provides ballistic, blast and overhead protection for its four-person crew. The ASV, with a payload of 3,600 pounds, a range of more than 400 miles, and a top speed of nearly 70 miles per hour, ensures both lethality and survivability for the warfighter.

M1117 Armored Security Vehicle (ASV)

Product Manager Sets, Kits, Outfits and Tools

The **Product Manager Sets, Kits, Outfits and Tools (PM SKOT)** manages more than 50 of the Army's combat engineer and ordnance sets, kits, outfits and tools (SKOTs), providing industrial-quality tools with lifetime warranties, foam cutouts for rapid inventory, and increased ease of accountability and transportability to the soldier. PM SKOT's broad portfolio includes SKOTs for tracked and wheeled vehicle emergency repair and maintenance, armament systems repair, hydraulic systems repair, metal working and machining, cutting and welding, engineering and construction, urban operations, Army diving missions, inflatable boats and motors, and fire suppression and protection equipment.

Product Director Test Measurement and Diagnostic Equipment

The **Product Director Test, Measurement and Diagnostic Equipment (PD TMDE)** is responsible for the life-cycle management of the Army's calibration sets, general purpose electronic test equipment (GPETE) and its modernization through the test equipment modernization program, and the integrated family of test equipment, composed of at-platform automatic test systems and off-platform automatic test systems.

Product Director Horizontal Technology Integration

The **Product Director Horizontal Technology Integration (PD HTI)** focuses on identifying relatively mature technologies (technology readiness level 6 or greater) at the component or subsystem level for potential insertion into and improvement of joint ground systems—those in the portfolios of the Program Executive Office (PEO) Combat Support and Combat Service Support (CS&CSS), PEO Ground Combat Systems (GCS), and the U.S. Marine Corps' PEO Land Systems and Project Manager (PM) Light Armored Vehicles (LAV). Support is also provided to PEO Integration.

The primary method used to identify potentially useful technologies is through the PEO CS&CSS-sponsored/PD HTI-executed joint ground system enterprise market investigation process. This process involves identification of technology areas of interest to the commercial marketplace, review of technology ideas submitted, physical demonstration by the vendor of selected technologies, demonstration assessment by a government team of subject-matter experts, referral of promising technologies to relevant PEOs and other government organizations, and data storage in an information database for reference.

Product Director Non-Standard Vehicles

The **Product Director Non-Standard Vehicles (PD NSV)** provides the Afghan national security forces (ANSF) cradle-to-grave life-cycle management of commercial light and medium tactical vehicles and buses, consisting of four vehicle fleets with 19 variants and more than 50,000 vehicles delivered. These vehicles provide the ANSF with critical maneuver capability and allow them to independently conduct police and security operations. PD NSV's mission is to provide the ANSF the capability and capacity to be self-sustaining in the procurement, management and sustainment of their vehicle fleets, a mission that is a critical part of the successful transition of U.S. Forces out of Afghanistan.

Project Manager Mine Resistant Ambush Protected Vehicles

The **Project Manager Mine Resistant Ambush Protected (PM MRAP)** encompasses thousands of highly survivable MRAP vehicles under four product managers: PM Joint Logistics and Sustainment, PM MRAP Vehicle Systems, PM MRAP All-Terrain Vehicles (M-ATV), and PM Assured Mobility Systems (AMS).

MRAP vehicles are armored vehicles with a blast-resistant, V-bottomed underbody designed to protect the crew from mine blasts and fragmentary and direct-fire weapons. MRAP features four vehicle categories: Category I for urban combat missions; Category II for convoy escort, troop transport, explosive ordnance disposal and ambulance missions; Category III for clearing mines and explosives; and the M-ATV, a smaller, lighter-weight platform. A wrecker, or MRAP recovery vehicle (MRV), was added to the fleet in late 2010.

The MRAP fleet of vehicles consists of 24 discernible variants from six different commercial manufacturers. Originally envisioned as a few thousand vehicles to assist with the growing threat of improvised explosive devices (IEDs), the fleet immediately demonstrated significantly higher survivability than other vehicles fielded. Follow-on acquisition based on MRAP success now supports all five services and Special Operations Command. The current MRAP fleet has increased to more than 27,000 vehicles. The smaller Category I vehicles in the 17- to 25-ton range can carry a crew of up to eight, while the larger Category II vehicles weigh as much as 40 tons and protect a crew of up to 10. MRAP vehicles serve in a multitude of missions and are the wheeled vehicle of choice for the most dangerous combat encounters in current operations. MRAPs provide significant protection from small arms from all angles and are especially adept at mitigating blast effects—much more so than lighter vehicles. Most also have the ability to carry extra protection for other types of specialized threats if the mission dictates. All variants come complete with a communications suite, a gunner's turret and a chassis capable of much higher mobility than other vehicles of similar weight. Overall, the MRAP family of vehicles provides incredible flexibility and capability to the warfighter.

While already considerably mobile, many Category I vehicles have received suspension upgrades, including a fully independent suspension system (ISS) to replace the solid-axle system provided at the time of initial purchase. Follow-on procurements have installed the ISS on the production floor.

Other enhancements include the integration of a Common Remotely Operated Weapons System (CROWS), a tube-launched optically tracked wire-guided (TOW) missile improved target acquisition system (ITAS), interior and exterior survivability enhancements, ride and comfort upgrades, and exterior lighting packages.

(Left) Mine Resistant Ambush Protected (MRAP) vehicle and MRAP All-Terrain Vehicle (M-ATV)

Product Manager Joint Logistics and Sustainment

The **Product Manager Joint Logistics and Sustainment** team is responsible for all aspects of planning and coordinating life-cycle logistics for the MRAP family of vehi-

:les. From the inception of this program, he Logistics team has been focused on the establishment and sustainment of a high evel of readiness for MRAPs. Despite the ncrease in fielded MRAP vehicles from a ew hundred to tens of thousands, the eadiness rate of the MRAPs delivered to perating units has consistently remained it or above 90 percent.

The rapid fielding of MRAP vehicles, ombined with the relatively large number of manufacturers and corresponding vehi-le types and variants, has increased the omplexities and challenges of sustaining MRAPs. Key activities being addressed in-lude technical data packages and other ypes of documentation, training, whole-ale level support, in-theater management, lepot and field-level maintenance, and in-egrated supply chain management.

Product Manager MRAP Vehicle Systems

Also known as the Army MRAP team, ne **Product Manager for MRAP Vehicle ystems (PM MVS)** manages both the **MaxxPro Family of Vehicles (FoV)** and **Caiman FoV**. The MaxxPro fleet has many ell-known subvariants including the MaxxPro Base, MaxxPro Plus, MaxxPro ash, MaxxPro Ambulance and MRAP re-overy vehicle. The Caiman fleet consists of ne Caiman Base, Caiman Plus, Caiman Multi-Terrain Vehicle (C-MTV), Caiman mbulance, and the Command and Con-ol On-The-Move (C2OTM) variant. With ore than 7,500 MaxxPro and almost 3,000 aiman vehicles, PM MVS is responsible r almost half of the entire MRAP FoV.

Future upgrades over the course of the oming year will bring many of the earliest-roduced variants to the more capable lev-s of the latest-produced vehicles. This eans bringing an entirely new chassis to e older MaxxPro fleet, including an ISS ith increased payload and a new, more owerful engine. Many older Caiman ucks are being converted into the C-MTV, hich also provides a new engine, trans-ission and ISS, bringing the vehicle to a ew level of performance. Both vehicles ill remain in the Army's enduring fleet, ith the Caiman being investigated for op-ations in Korea with the Eighth Army.

Several other improvement efforts—in-uding the incorporation of protective RPG ts, TOW missile packages and enhanced mmunication suites—have ensured that e Army's MaxxPro and Caiman vehicles ill remain safe and viable combat support hicles well into the future.

oduct Manager MRAP All-Terrain ehicles

Also referred to as the Multi-Service RAP team, the **Product Manager MRAP l-Terrain Vehicle (PM M-ATV)** manages e **M-ATV** and **RG-33** vehicle platforms,

Common Remotely Operated Weapons System (CROWS) atop an MRAP

designed to provide MRAP levels of protection with greater off-road mobility in Afghanistan. The lighter weight and smaller size of these platforms also allow easier transportability.

The **Underbody Improvement Kits (2) (UIK2)** effort is a survivability upgrade for the M-ATV platform. The UIK2 consists of automotive and armored components and is in response to an urgent theater requirement. The M-ATV is used in small-unit combat operations in highly restricted rural, mountainous and urban environments. Missions include mounted patrols, reconnaissance, security, convoy protection, communications, command and control, and combat service support.

The RG-33 platform features several variants including the RG-33L, RG-33L Ambulance, the RG-33 with add-on armor, and the RG-33 Special Operations. Many of these vehicles have received suspension upgrades to enhance ride quality. Other improvements include C4I, government-furnished equipment and weapons suites. Category II vehicles make up approximately one-third of the fleet and will continue to serve in all theaters with highly protected troop transport and warfighting roles.

Product Manager Assured Mobility Systems

The **Product Manager Assured Mobility Systems (PM AMS)** is responsible for managing the entire life cycle (development, acquisition and sustainment) of route-clearance equipment for the Army. This mission involves equipping the forward deployed route-clearance and explosive ordnance disposal teams operating in Afghanistan with the capability to detect, identify, interrogate and neutralize IEDs. PM AMS vehicles are combined at the discretion of the field commander to create the appropriate route-clearance package. The future company configuration of a route-clearance team will consist of a Buffalo, a vehicle-mounted mine detection (VMMD) set consisting of two Husky vehicles and four medium mine-protected vehicles (MMPV), used for command and control. The AMS family of vehicles includes the Buffalo, Panther, RG-31 MK5E, VMMD and Joint EOD Rapid Response Vehicle (JERRV).

The **Buffalo Mine Protected Clearance Vehicle (MPCV)** is a six-wheeled, mine-protected, armored personnel carrier with a one-piece body designed to provide survivability for a crew of six. The front, side and rear armor provide small-arms protection, while the V-shaped hull deflects blasts from mines and IEDs. The Buffalo MPCV has an articulated hydraulic arm mounted on the front bumper and can be used to investigate suspected mine/IED locations. The Buffalo MPCV is used by engineer units during area and route-clearance missions.

The **Vehicle Mounted Mine Detection (VMMD)** system consists of two Husky vehicles operating in tandem to detect buried explosives. Each Husky has a detection array mounted under the vehicle, which is deployed during route-clearance operations. If a suspected explosive is detected, the system marks the spot on the ground for follow-up interrogation by either the Buffalo or RG-31 fitted with an interrogation arm.

The **RG-31 MK5E** vehicle is designed to safely transport personnel or equipment in

areas where mines and IEDs may be deployed. In addition, the V-shaped hull provides mine blast protection. The RG-31 MK5E and Panther vehicles will be deployed jointly as a solution to the MMPV requirement.

The **Panther** is a 6x6 wheeled vehicle designed to provide enhanced crew protection and system survivability with add-on armor protection, an automatic fire extinguishing system, and a chemical, biological, radiological, nuclear or high-yield explosive overpressure system. There are three variants of the Panther: the XM1226 Engineer (holds four combat engineers, one robot and 180 cubic feet of storage), the XM1227 EOD (holds four explosive ordinance specialists, two robots and 197 cubic feet of storage) and the XM1229 Prophet (seats six warfighters for intelligence, surveillance, electronic warfare and target acquisition operations). The XM1226 provides warfighters with the ability to transport, charge, configure and deploy the robot without compromising force protection. The Panther has a rear hydraulic ramp for crew and robot ingress/egress, and the XM1226 has a bulkhead door separating the crew compartment from the cargo area.

The **Joint EOD Rapid Response Vehicle (JERRV)** is a joint service, mine-protected vehicle with a primary role of supporting first responders such as explosive ordnance disposal specialists in neutralizing IEDs, mines and other ordnance. The JERRV is an operational need statement system for use in theater during deployment operations and will be replaced by the XM1227 Panther as a program of record for fielding in the continental United States.

Project Manager Tactical Vehicles

Offices within the **Project Manager Tactical Vehicles (PM TV)** include: Product Manager Joint Light Tactical Vehicles (PM JLTV), Product Manager Light Tactical Vehicles (PM LTV), Product Manager Medium Tactical Vehicles (PM MTV), and Product Manager Heavy Tactical Vehicles (PM HTV).

Product Manager Joint Light Tactical Vehicles

The **Product Manager Joint Light Tactical Vehicles (PM JLTV)** is the service lead for the acquisition of the **Joint Light Tactical Vehicle (JLTV)**. The JLTV family of vehicles and companion trailers is a central component of the Army and Marine Corps' tactical wheeled vehicle strategy, balancing long-term warfighter needs of protection, performance, and payload in an affordable and expeditionary platform designed for global operations.

Capability gaps within the existing light tactical wheeled vehicle fleet are the result of an imbalance in protection, payload and performance. The JLTV FoV will be able to deliver all of these capabilities within an affordable and transportable solution, meeting the Army and Marine Corps' rotary- and fixed-wing air, sea and overland transport requirements—something no existing light tactical wheeled vehicle can do.

The development of the JLTV reinforces the Army and Marine Corps' approach to interoperable platforms that provide expeditionary and protected maneuver to forces currently supported by the Humvee. The JLTVs also improve payload efficiency through chassis engineering, enabling the vehicles to be deployed with the appropriate amount of force protection through scalable armor solutions.

The program has successfully completed a 27-month technology development phase, which consisted of the development and fabrication of full-up prototype vehicles that completed rigorous performance, ballistics, and RAM testing at Aberdeen Proving Ground, Md., and Yuma Proving Ground, Ariz.

The EMD phase will be full and open competition, with the selection of up to three offerors. Milestone B is currently scheduled for the fourth quarter of FY 2012.

Joint EOD Rapid Response Vehicle (JERRV)

Product Manager Light Tactical Vehicles

The **Product Manager for Light Tactical Vehicles (PM LTV)** is responsible for the Army's **High Mobility, Multipurpose Wheeled Vehicle** (Humvee) Family of Vehicles and **Light Tactical Trailers (LTT)**. The Army's requirement for Humvees is 137,000 vehicles, and more than 250,000 have been built and are in service worldwide.

The versatile Humvee is the Army's most ubiquitous vehicle, providing a common, light tactical wheeled capability. The Humvee is the Army's (and other services') primary light wheeled vehicle for combat, combat support and combat service support missions. Humvees of all variants (but mostly up-armored versions) are currently deployed in support of operations in Afghanistan.

The Humvee FoV consists of multiple configurations built on a common chassis to support weapon systems, command-and-control systems, and field ambulances and to provide ammunition, troop and general cargo transport. It is currently equipped with a high-performance, 6.5-liter, turbocharged diesel engine, electronic automatic transmission and four-wheel drive. It is air-transportable and low-velocity airdrop-certified (except for the maxi ambulance variants). The Humvee can be equipped with a self-recovery hydraulic winch and can support payloads from 2,500 to 5,100 pounds (including crew and pintle loads), depending on the model.

Recent production Humvees are built on the expanded capacity vehicle (ECV) chassis. The ECV variants were first introduced in 1995 as the M1113 Shelter Carrier, providing up to 5,100 pounds of payload, and the M1114 Up-armored Humvee (UAH), to provide crew protection from small-arms fire and overhead fragmentation from artillery and mortar shells, and to protect the underbody from antipersonnel/antitank mines. Current production variants of the Humvee family include the M1151A1 ECV Armament Carrier, M1152A1 ECV Cargo/Troop/Shelter Carrier, M1165A1 ECV Command and Control Carrier and the M1167 ECV TOW Missile Carrier vehicles. Like the M1114, the M1151 has a rooftop weapon station that can accommodate an M60 machine gun, M2 machine gun, Mk 19 grenade launcher or the M240/M249. Unlike most earlier models, these latest versions are also designed for the application of additional armor packages over their base protection levels, as the mission profile dictates.

Humvee new production for the Army ended in February 2011, although production for the other services and foreign military sales customers will continue into late

2012. Included in the Army production is a new M997A3 ambulance configuration, built on the ECV chassis, which is planned specifically for the Army National Guard to meet its homeland security and natural disaster relief missions. Because of the large numbers of Humvee variants found throughout the Army and the continued need for their service into the foreseeable future, plans are currently being developed to study what technologies could be applied to the Humvee to realistically improve performance and reliability in the short term. This effort is designed to examine potential solutions that would improve current ECV performance and mobility, while addressing concerns with major component obsolescence through the integration of commercial off-the-shelf enhanced capabilities, resulting in a government performance specification to support future procurement as desired.

The LTT is the Humvee trailer. It has been tested and approved (materiel released) for use per the Humvee mission profile. The LTT comes in three variants: M1101 (LTT-L), M1102 (LTT-H) and heavy chassis (LTT-HC). The Army has met the LTT requirement of 47,350 trailers. Production will be completed in FY 2014, and the Army will have a fully modernized fleet of light tactical trailers.

PM LTV assumed responsibility for the **Light Engineer Utility Trailer (LEUT)** program in August 2011, the requirement for which was validated by the G-3/5/7 in March 2007. A material developer decision from the Army Acquisition Executive is anticipated in late FY 2013. The LEUT will come in two variants, a 4-ton trailer and a 10-ton trailer, to serve as dedicated carriers for various combat engineer equipment.

Product Manager Medium Tactical Vehicles

The **Product Manager Medium Tactical Vehicles (PM MTV)** is responsible for the **Family of Medium Tactical Vehicles (FMTV)** including FMTV specialty vehicles and FMTV trailers, Light Medium Tactical Vehicles (LMTV), and Medium Tactical Vehicles (MTV).

The medium truck fleet has historically accounted for more than half of the Army's single-lift payload capacity. In redefining this vital fleet, Army planners took the opportunity to focus on a family approach; that is, to combine both 2.5-ton and 5-ton payload classes into a single acquisition program that would yield a logistically significant degree of component commonality across all medium fleet variants.

The Army's requirement for medium trucks is now more than 72,000 vehicles. These vehicles are required across the entire spectrum of combat, combat support and combat service support units. They must perform roles such as unit mobility, field

High Mobility, Multipurpose Wheeled Vehicle (Humvee) family of vehicles

feeding, water distribution, local and line-haul transportation, maintenance platforms, engineer operations, communication systems, medical support and towing artillery pieces. All medium vehicles must be capable of operating worldwide on primary and secondary roads as well as on trails, and cross-country in weather extremes from minus 50 to 120 degrees Fahrenheit.

LMTV systems include the M1078 2.5-ton standard cargo, M1079 2.5-ton van, M1080 2.5-ton chassis and M1081 2.5-ton standard cargo low-velocity airdrop (LVAD) capable. The MTV systems include the M1083 5-ton standard cargo, M1084 5-ton standard cargo with MHE, M1085 5-ton long cargo, M1086 5-ton long cargo with MHE (crane), M1088 5-ton tractor, M1089 5-ton wrecker, M1090 5-ton dump, M1092 5-ton chassis, M1093 5-ton standard cargo LVAD, M1094 5-ton dump (LVAD) and M1096 5-ton long chassis.

FMTV special vehicles include the M1087 expandable van, XM1140 high-mobility artillery rocket system (HIMARS) carrier, M1147 FMTV load handling system (LHS) trailer, M1148 FMTV LHS truck, M1157 10-ton dump and XM 1160 medium extended air defense system carrier. FMTV trailers include the M1082 trailer cargo 2.5 ton and M1095 trailer cargo 5 ton. In addition, the office helps coordinate activities on M900 series 5-ton trucks.

The FMTV achieves extraordinary commonality by sharing many subsystems and components in the 4x4 (LMTV), 6x6 (MTV) and companion trailer configurations. The trucks share, for example, common engine assemblies (with different horsepower ratings), cooling systems, transmissions, intake and exhaust systems, front axles and suspension systems, tires and wheels, cab assembly, vehicle control gauges, and much more. They differ primarily in number of axles (two versus three) and standard cargo bed size (12 feet versus 14 feet) to accommodate different payload ratings (2.5 tons versus 5 tons) and body styles.

The FMTV deviates from predecessor vehicle designs by having its tilt cab over the engine. This design approach contributes to the Army's goal of significantly improving the deployability of units; because a typical FMTV vehicle is some 40 inches shorter than the vehicle it replaces, it requires less space aboard deploying aircraft or surface shipping. This reduced length also contributes to a shorter turning radius and better off-road mobility. Off-road mobility is further enhanced by a standard central tire inflation system and state-of-the-art suspension.

Product Manager Heavy Tactical Vehicles

The **Product Manager Heavy Tactical Vehicles (PM HTV)** is responsible for programs including the Heavy Equipment Transporter System (HETS), M915 family of vehicles, Heavy Expanded Mobility Tactical Truck (HEMTT), Palletized Load System (PLS), flatracks, container handling, and mission modules, as well as fifth-wheel and special trailers.

The **M1070/M1000 Heavy Equipment Transporter System (HETS)** deploys, transports, recovers and evacuates combat-loaded M1 tanks and other vehicles of similar weight to and from the battlefield. More than 640 have been deployed in support of overseas contingency operations (OCO). The M1070 provides line-haul, local-haul and maintenance evacuation on and off the road during tactical operations worldwide.

Unlike previous HETS, the M1070 is designed to carry both the tank and its crew. Approximately 2,311 HETS have been fielded to date. The M1070A1 HET tractor has been updated with a new power train

M984 Heavy Expanded Mobility Tactical Truck

with 200 additional horsepower, single-speed transfer case for ease of operation, and numerous front suspension and drive system updates to increase the safe operating load capacity of the vehicle steering and handling systems. The M1070A1 is designed with an armored A-kit cab and B-kit armor. The M1070A1 is in the process of type classification and materiel release; fielding began in spring 2012.

The M1000 Semitrailer has been improved with a series of maintainability changes including self-adjusting brakes, central lubrication system at each axle, and a hydraulic system upgrade that reduces trailer raise/lower times and is expected to result in significant reliability growth. The enhanced M1000 semitrailer is in the process of production verification testing.

The **Heavy Expanded Mobility Tactical Truck (HEMTT)** is the workhorse of Army combat divisions. More than 3,100 HEMTT systems are being used in overseas contingency operations. It is the key combat service support enabler for all brigade combat teams. The 11-ton, eight-wheel-drive FoV is designed to operate in any climatic condition.

There are several basic configurations of the HEMTT-series trucks: the M977 cargo truck with light materiel-handling crane; M985 cargo truck with medium materiel-handling crane; the M978 2,500-gallon fuel tanker; the M983 tractor; the M984 wrecker; and the M1120 Load-Handling System (LHS) and the M983 Light Equipment Transporter (LET), used in Stryker recovery operations and movement of heavy engineer equipment. The HEMTT is used as a prime mover for the Patriot missile system, M7 forward repair system, and tactical water purification system and as the chassis for the M1977 common bridge transporter, M1142 tactical firefighting truck and M1158 HEMTT-based water tender. The HEMTT is also compatible with the PLS trailer.

The HEMTT recap program will recapitalize HEMTT vehicles to 0 miles/0 hours and to the current production A4 configuration. The HEMTT recap is a bumper-to-bumper refurbishment of the entire truck with the following technology insertions: CAT 15 engine, electronic transmission, anti-lock brake system (ABS), traction control and larger cab. The HEMTT A4 is designed with an armored A-kit cab and B-kit armor.

The **Palletized Load System (PLS)** is the primary component of the maneuver-oriented ammunition distribution system. Roughly 1,200 PLS are being used in OCO. It also performs local-haul, line-haul, unit resupply, and other transportation missions in the tactical environment. In addition, it is used as the prime mover for the M7 Forward Repair System and various engineer mission modules (M4 Bituminous Distributor Module, M5 Concrete Mobile Mixer Module, M6 Dump Body Module, and the dry support bridge launcher vehicle).

The PLS comes in two mission-oriented configurations: the M1074 and the M1075. The M1074 is equipped with a variable reach materiel-handling crane (MHC) to support forward-deployed field artillery units. The M1075, without MHC, is used in conjunction with the M1076 trailer to support transportation line-haul missions.

The PLS recap program will recapitalize PLS vehicles to 0 miles/0 hours and to the A1 configuration. The current PLS recap is a bumper-to-bumper refurbishment of the entire truck with the following technology insertions: CAT 15 engine, electronic transmission, ABS, traction control and larger cab. The PLSA1 is designed with an armored A-kit cab and B-kit armor.

The M1076 PLS trailer is a three-axle, wagon-style trailer with a 16.5-ton payload capacity that is equipped with a flatrack that is interchangeable between truck and trailer. The flatracks are lifted on and off the truck and trailer by a hydraulic-powered arm mounted on the truck, eliminating the need for additional material-handling equipment. The container transfer enhancement upgrade that allows for ISO container loading onto the PLS-T is scheduled for fielding in FY 2012.

The current production PLSA1 provides vehicle upgrades to incorporate a modern power train with increased horsepower, independent suspension, and an updated cab that is common with the current HEMTT configuration. The PLSA1 is long-term protection strategy compliant with an A-kit cab and B-kit armor.

The Army's **M915 Series Line Haul Tractors** operate on highways and secondary roads to transport bulk supplies and fuel to U.S. forces. Approximately 350 M915 series line-haul trucks are being used in overseas contingency operations. The M915A5 is based upon Freightliner's commercial Western Star tractors and incorporates transport industry technologies for safety, fuel efficiency and low operating costs per mile.

The M915 series fleet of vehicles is found primarily in active and reserve component transportation units that are responsible for the rapid, efficient transport of bulk supplies from ocean ports to division support areas within a theater of operation. The M915A5 is the current production configuration and has a maximum gross combined vehicle weight of 120,000 pounds when operating with the M872A4 semitrailer; it began fielding in September 2010. The M915A5 is designed with an armored A-cab and can be outfitted with B-kit armor.

The **Interim Stryker Recovery System Generation II (ISRS GEN II)** is a block upgrade to the Generation I system. To date, 57 ISRS GEN I and 40 GEN II have been deployed in support of contingency operations. The ISRS program is in the process of being reviewed in order to become a program of record. ISRS GEN II will be renamed the Modular Catastrophic Recovery System upon approval as a program of record. The ISRS GEN II provides an organic recovery and evacuation asset that is capable of lifting, towing and transporting a wide variety of disabled vehicles—including Stryker or MRAP—that have been catastrophically damaged, when damage exceeds the recovery capability of the M984 HEMTT wrecker or "like-vehicle recovery" in the forward battalion area. The ISRS GEN II consists of three modular components including its prime mover. The designated prime movers for the ISRS GEN II are the HEMTT M983A4 LET and the M916A3 6x6 Truck Tractor. The second and third components of the ISRS GEN II are the **Fifth Wheel Towing and Recovery Device (FWTRD)** and the **Tilt Deck Recovery Trailer (TDRT)**. The FWTRD can lift-tow up to 140,000 pounds gross combined weight and lift up to 32,000 pounds with optimal weight distribution. In addition, the FWTRD is equipped with a dedicated 35,000-pound winch and boom spade caps, creating a stable platform for recovery winching. The TDRT can evacuate a casualty up to 35 tons.

AMMUNITION

The Program Executive Office for Ammunition (PEO Ammo) has the mission to continue being the best provider of conventional, leap-ahead munitions, mortars, towed artillery systems and counter-improvised explosive device (IED) products by fostering innovation and diversity for the warfighter. Project managers within the PEO include Combat Ammunition Systems, Maneuver Ammunition Systems, Joint Program Manager Towed Artillery Systems, Close Combat Systems, Project Director Joint Services and Project Director Joint Products.

Project Manager Combat Ammunition Systems (PM CAS)

The Project Manager Combat Ammunition Systems (PM CAS) is responsible for equipping soldiers and marines with cannon-launched, indirect-fire munitions and mortar weapons systems. Organizations within PM CAS include Product Manager Excalibur, Product Manager Guided Precision Munitions and Mortar Systems (PM GPM2S), Conventional Ammunition Division, Technical Management Division and Business Management Division.

Product Manager Excalibur

The **M982 Excalibur**, a 155 mm, precision-guided, artillery high-explosive projectile with extended range, has been fielded to servicemembers and successfully employed in combat operations. Excalibur couples global positioning system (GPS) precision-guidance technology with an inertial measurement unit to provide accurate, first-round fire-for-effect capability in an urban setting with accuracy better than 10 meters circular error probable (CEP). Excalibur is approximately 1 meter in length and weighs 106 pounds. Its extended range (up to 40 kilometers) and high accuracy result in increased lethality with a decrease in required volume of fire per engagement. Excalibur Increment Ia is in full-rate production, and Excalibur Increment Ib is in engineering and manufacturing development.

Product Manager Guided Precision Munitions and Mortar Systems

The **Product Manager for Guided Precision Munitions and Mortar Systems (PM GPM2S)** is the life-cycle manager responsible for guided munition improvements for cannon-launched weapons (mortars and artillery), mortar weapons and mortar fire control systems. Assigned guided precision munitions include the **XM1156 Precision Guidance Kit (PGK)** and the Urgent Material Release (UMR) **Accelerated Precision Mortar Initiative (APMI)**. Mortar weapons include the 60 mm, 81 mm and 120 mm systems and related equipment. Fire control systems include handheld devices and vehicle-mounted systems used to perform mortar tactical and technical fire control for infantry, heavy and Stryker brigade combat teams (BCTs).

The **APMI** is a response to an Operation Enduring Freedom (OEF) operational need statement (ONS) requiring a GPS-guided, 120 mm mortar cartridge with 10 meters CEP accuracy to rapidly defeat personnel targets while minimizing collateral damage. APMI is currently compatible with U.S. dismounted 120 mm weapons and fire control system, and the Stryker double-V hull mortar carrier and fire control system. It has been successfully used in operations in OEF.

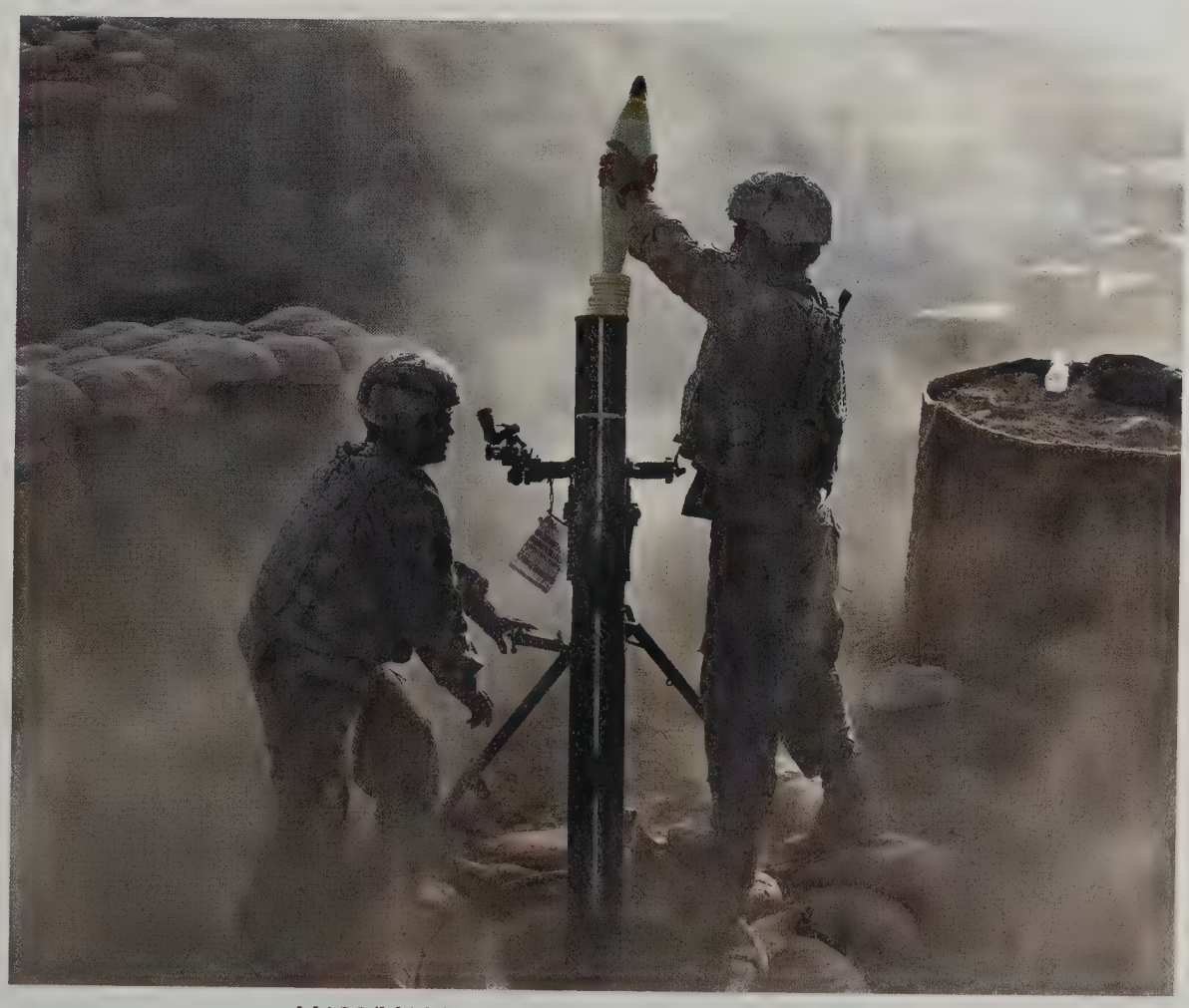
The **PGK** is a GPS guidance kit with proximity and point detonating fuzing functions. It is compatible with existing high-explosive, 155 mm M549A1 and M795 cannon artillery projectiles. The PGK corrects the ballistic trajectory of the projectile to reduce delivery errors and improves projectile accuracy to a range-independent accuracy of less than 50 meters CEP. The PGK will effectively reduce target delivery error of conventional artillery munitions, reducing the number of projectiles required to execute a fire mission. Fielding is expected in 2014.

The **M224A1 60 mm Mortar Weapon System** is a lightweight, high-angle-of-fire, smooth-bore, manportable, muzzle-loaded mortar with weight reduced by 20 percent (44 pounds to 35.3 pounds) and reduced maintenance requirements. The M224A1 consists of an M225A1 cannon (tube), M170A1 bipod assembly, M7A1 baseplate, M8 auxiliary baseplate and the M67A1 sight unit. The M224A1 fires the complete family of 60 mm ammunition including high-explosive, smoke, illumination, infrared illumination and practice cartridges. With ranges from 70 meters to 3,500 meters, the M224A1 meets lethality, range and weight requirements for light forces.

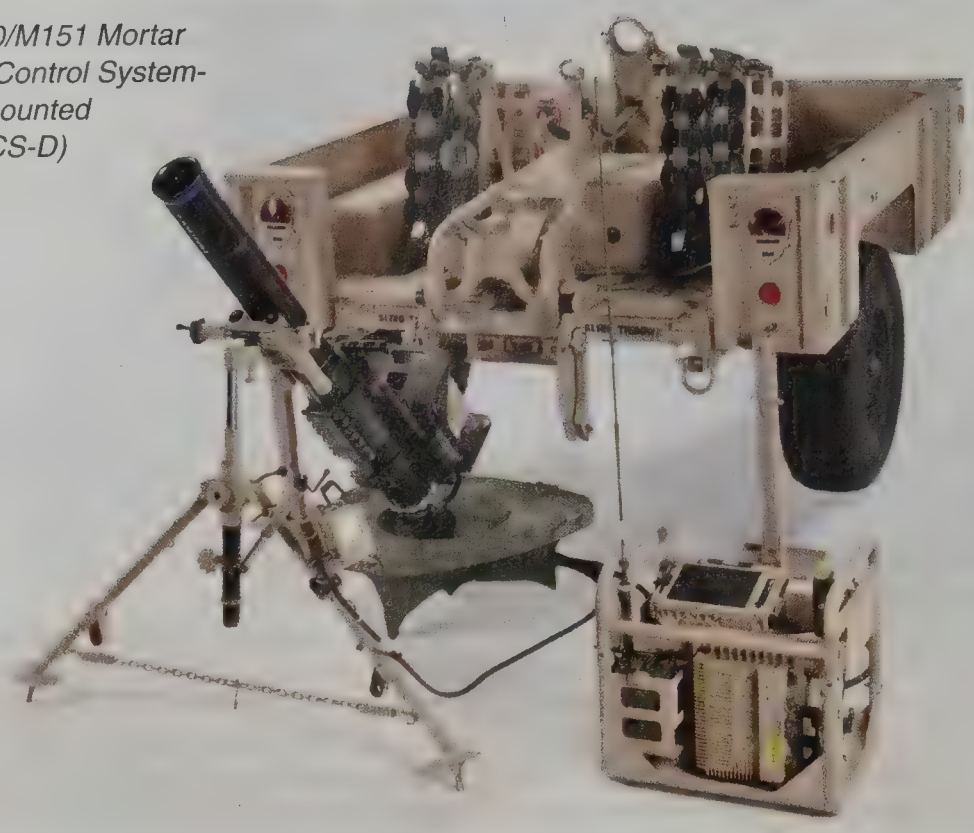
The **M252A1 81 mm Mortar System** is a smooth-bore, muzzle-loaded weapon that replaced the M252 mortar. It features a high rate of fire, extended range, improved lethality and improved overall system characteristics, reducing overall system weight by 20 percent (90.3 pounds to 70.3 pounds). The entire family of 81 mm ammunition can be fired by the M252A1. The M252A1 consists of the M253 cannon (tube), M177A1 bipod, M3A2 baseplate and the M67A1 sight unit.

The **M120/M121 120 mm Battalion Mortar System** is a smooth-bore, muzzle-loaded, high-angle-of-fire weapon organic to the battalion, providing immediate long-range, lethality, illumination and smoke-screening effectiveness for close combat. It is used in a ground-mounted (M120) or vehicle-mounted (M121 on the M1064A3 mortar carrier) role. It consists of the M298 barrel assembly, M191 bipod assembly, the M9A1 baseplate and the M67A1 sight. The 120 mm battalion mortar system provides close-in and continuous indirect fire support to maneuver forces and can rapidly respond to threats.

The **M326 Mortar Stowage Kit (MSK)** is a 120 mm mortar employment improvement. The powered device enables a 120 mm mortar to be quickly put in or out of action. The M326 uses a mortar support strut



M120/M121 120 mm Battalion Mortar System



M150/M151 Mortar Fire-Control System-Dismounted (MFCS-D)

to hold the mortar tube, baseplate and bipod together in transport mode for ease of deployment. This assembly is emplaced or recovered by a hydraulic winch with a manual backup.

The **M95/M96 Mortar Fire-Control System (MFCS)** is a digital fire-control system for the vehicle-mounted M121, linking mortar fires with the digital battlefield. MFCS provides increased responsiveness, crew survivability and mortar accuracy.

The **M150/M151 Mortar Fire-Control System-Dismounted (MFCS-D)** is similar to the M95 MFCS and is being fielded with the M326 to provide a digital fire-control system for the ground-mounted 120 mm system. MFCS-D provides increased responsiveness, crew survivability and mortar accuracy.

The **M32 Lightweight Handheld Mortar Ballistic Computer (LHMBC)** is a joint service Marine Corps/Army system that calculates technical firing solutions for the entire family of fielded U.S. mortars and their complete inventory of ammunition. It is linked into the digital fire support system and includes an internal GPS receiver for improved tube positioning accuracy.

Project Manager Maneuver Ammunition Systems (PM MAS)

The **Project Manager Maneuver Ammunition Systems (PM MAS)** is responsible for the life-cycle management—including development, production and fielding—of all Army direct-fire ammunition (except nonlethal) and for the procurement of Air Force, Navy and Marine Corps direct-fire ammunition assigned to PEO Ammunition as the single manager for conventional ammunition executor. Under its mission for procurement of nonstandard ammunition, PM MAS supports allies with direct- and indirect-fire ammunition and selected weapons. Offices within PM MAS include the Product Manager Small Caliber Ammunition, Product Director Medium Caliber Ammunition, Product Manager Large Caliber Ammunition and Product Director Non-Standard Ammunition.

Product Manager Small Caliber Ammunition (PM SC)

The **Product Manager Small Caliber Ammunition (PM SC)** is the life-cycle manager for the full range of small-caliber ammunition including production of legacy items such as pistol, shotgun and rifle ammunition up to and including .50-caliber for all the armed services and development of new ammunition to support emerging Army requirements. Small-caliber systems include .22-caliber, .38-caliber, 9 mm, .45-caliber, 12-gauge shotgun, 5.56 mm, 7.62 mm and .50-caliber families of munitions. PM SC also manages the modernization of the Lake City Army Ammunition Plant, Mo., the primary source of small-caliber ammunition.

The **M855A1 Enhanced Performance Round** is a lead-free version of the M855 cartridge that is fired from the 5.56 mm family of weapons (M4, M16 and M249) and is the newest of the small-caliber family of munitions. The M855A1 EPR uses a new bullet design that resulted in a number of significant enhancements over the original general purpose M855 fielded in the early 1980s. Improvements include better hard-target penetration, more consistent performance against soft targets and significantly increased distances of these effects. The EPR allows training exercises to be conducted on ranges where lead projectiles are no longer allowed. The same technology is also being used to improve 7.62 mm ammunition.

Product Director Medium Caliber Ammunition (PD MC)

The **Product Director Medium Caliber Ammunition (PD MC)** is responsible for life-cycle management of direct-fire combat and training ammunition in 20 mm, 25 mm, 30 mm, and 40 mm caliber families for the Army. Under the single manager for conventional ammunition executor, PD MC is responsible for procurement of medium-caliber combat and training ammunition for the Air Force, Navy and Marine Corps. PD MC supports medium-caliber ammunition needs of the individual warfighter and weapon platforms, which include the Mk 19 Automatic Grenade Launcher; M203/320 Grenade Launcher; Bradley Fighting Vehicle; Light Armored Vehicle; AH-64 Apache; MH-60 Black Hawk and AH-1W Super Cobra helicopters; A-10 Thunderbolt, AC-130U Spectre, F-15 Eagle, F-16 Falcon, FA-18 Hornet, F-22 Raptor and F-35 Joint Strike Fighter aircraft; Land-based Phalanx Weapons System (LPWS) for Counter Rockets Artillery and Mortars (C-RAM); and the Phalanx Close-In Weapon System (CIWS) for naval vessels.

Non-Dud Producing (NDP) training ammunition is being developed for the 40 mm grenade family to allow soldiers and units to train more realistically on continental U.S. training ranges without safety concerns from unexploded ordnance, while meeting environmental requirements with nontoxic components. Currently, units cannot go downrange during training to conduct fire and maneuver tactics. NDP rounds are being developed for both the low-velocity family, fired from the M203 and M320, and the high-velocity family, fired from the Mk 19. Low-rate initial production and full operational capability are planned for fiscal year (FY) 2015. A capability development document was signed for the 40 mm high-velocity training round and a capability production document for the 40 mm low-velocity in December 2011.

Product Manager Large Caliber Ammunition (PM LC)

The **Product Manager Large Caliber Ammunition (PM LC)** is responsible for life-cycle management of large-caliber, direct-fire combat and training ammunition for the Army and Marine Corps. Platforms supported include the Abrams main battle tank (MBT) and Stryker mobile gun system. Primary target sets for ammunition being procured and new systems being developed are armor, structures, bunkers, obstacles and infantry squads. PM LC also develops and procures specialized ammunition for foreign military sales customers of the Abrams tank. Calibers supported include 105 mm and 120 mm.

The **M829E4** is a 120 mm, fifth-generation, kinetic energy, armor piercing, fin-stabilized discarding sabot cartridge for the

Abrams MBT. The cartridge is specifically designed to defeat future armored targets equipped with explosive reactive armor and active protection systems. The program is currently in engineering, manufacturing and development, with the Milestone C projected in FY 2014. This cartridge has an expanded operational temperature and provides a significant lethality overmatch against all projected armor threats.

The **Advanced Multi Purpose (AMP)** is a 120 mm, direct-fire, multipurpose munition to be developed for the Abrams MBT. AMP will provide the user with new capabilities to defeat antitank guided missile teams and breach reinforced walls. AMP has three modes of operation—airburst, point detonate and point detonate delay—that will allow the consolidation of the capabilities of four stockpiled cartridges into a single munition that can be used to defeat dismounted infantry, bunkers, obstacles and light armor. Additional benefits include increased logistical efficiency and being able to battle-carry a single munition that can be used for multiple engagement scenarios.

Product Director Non-Standard Ammunition (PD NSA)

The **Product Director Non-Standard Ammunition (PD NSA)** provides quality nonstandard ammunition and nonstandard mortar weapon systems to allied nations and other U.S. customers. Nonstandard ammunition/mortar weapons are ammunition, explosives and weapons that are not managed by national inventory control points, have not been safety-tested and type-classified for Army use, do not have a national stock number, and cannot be procured or requisitioned through the Army or other Department of Defense supply systems. The majority of this ammunition is produced in former Soviet/Eastern bloc countries. Munitions procured range from 5.45 mm through 122 mm, supporting individual and crew-served weapons and platforms including tanks, artillery and aircraft.

Joint Program Manager Towed Artillery Systems (PM TAS)

The **Joint Program Manager for Towed Artillery Systems (PM TAS)** takes a joint (Army and Marine Corps) perspective in managing the development, acquisition, testing, systems integration, product improvement and fielding of the **M777A2 155 mm Joint Lightweight Howitzer (LW155)** system, designed to enhance strategic mobility and provide the infantryman and marine with effective and responsive fire support. The LW155 is a joint Marine Corps and Army program that replaces the M198 155 mm Towed Howitzer. The LW155 is a general support system for the Army's light units, a direct-support cannon fire support system for the Stryker brigade combat team and the sole howitzer in the Marine Corps. The LW155 uses the M776 155 mm cannon, giving it a maximum firing range of approximately 30 kilometers with rocket-assisted projectiles, 24.7 kilometers with standard rounds and up to 40 kilometers using Excalibur. It has a maximum firing rate of four rounds per minute and a sustained rate of two rounds per minute. The M777A2 is fitted with onboard electronics, giving it self-locating, self-laying and digital communications similar to the M109A6 Paladin. The M777A2 adds the ability to fire the Excalibur precision-guided munition.

In addition to the M777A2 howitzer, other towed artillery systems supported in U.S. Army inventories include the **M119A2 105 mm Howitzer**, the **Improved Position and Azimuth Determining System (IPADS)**, and the **M198 155 mm Howitzer**.

The **M119A2** is a lightweight, 105 mm howitzer that provides continuous close fires to infantry brigade combat teams. The system weighs 4,330 pounds and is air assault/air drop capable. It has a range of 19.5 kilometers with rocket-assisted munitions (14 kilometers unassisted). It fires all currently fielded U.S. munitions and has a rate of fire of six rounds per minute. Its approved prime movers include the Humvee and 2.5-ton and 5-ton trucks.

A program to integrate digital fire-control capability onto the M119A2 howitzer was approved in 2008. Using the software for the M777A2 155 mm howitzer maximizes commonality in operation and training while minimizing program cost, schedule and risk. The application of a digital fire control will allow the digitized M119A2 to emplace and displace faster, provide more responsive fires, and become more survivable on the battlefield.

The **IPADS** provides common inertial survey control for all Army and Marine Corps field artillery, mortar, artillery meteorological and radar systems. PM TAS is also managing the effort to add a GPS feature to IPADS. **IPADS-G** will augment operations of the fire support community by providing the ability to maintain the current accuracy of IPADS without stopping for zero-velocity updates, increasing the artillery timeliness, availability of fires, lethality, survivability, and force protection on extended convoys or artillery missions. IPADS will be aided by an internal GPS receiver; however, it must also be capable of operating in an inertial fashion independently of GPS aid.

The Army began fielding the **M198 155 mm Towed Howitzer** in early 1979 to provide greater range and lethality for light-unit fire-support elements. As a successor to the older M114A1 155 mm towed system, the 15,750-pound (original fielded weight) M198 provided a maximum range of 30

M777 A2 155 mm Joint Lightweight Howitzer (LW155)

kilometers (with rocket-assisted projectiles) and the capability to fire a broader range of ammunition options than those available for 105 mm units. Normally towed by a 5-ton truck, the M198 can also be moved by a CH-47D Chinook helicopter or Air Force assets (C-130 and larger). The M777A2 has replaced the M198.

PM TAS also supports the **D-30 Howitzer** program. The D-30 Howitzer is a 122 mm Soviet towed Howitzer that entered service in the 1960s. It weighs 7,055 pounds and has a maximum range of 15.4 kilometers (21.9 kilometers assisted). It has a maximum rate of fire of 10 to 12 rounds per minute and a sustained rate of five to six rounds per minute. In 2010, PM TAS was given a requirement to provide 194 D-30s to the Afghan National Army. PM TAS has delivered 104 Howitzers, provided training on the operation and maintenance of the weapon system, and established a refurbishment capability in Afghanistan that is allowing Afghan workers to refurbish additional Howitzers.

Project Manager Close Combat Systems (PM CCS)

Nearly every mission U.S. soldiers face, either domestic or international, involves an item managed by **Project Manager Close Combat Systems (PM CCS)**. PM CCSs' contributions are on the forefront of theater operations and span multiple services, providing cutting-edge technology to defeat the ever-evolving and adapting threats, as well as legacy systems being used in new, innovative ways on today's battlefield. The PM CCS portfolio of products ranges from counter-IEDs, handheld pyrotechnic devices, C-4 explosives and shoulder-launched munitions (SLMs) to mine clearing line charges, hand grenades and nonlethal weapon sets.

Product Manager Countermine and Explosive Ordnance Disposal

Nothing is more important than the freedom to operate wherever required on the battlefield. Finding, neutralizing and discarding explosive hazards that impede this movement demand a complete spectrum of countermine and explosive ordnance disposal (EOD) solutions for vehicle, handheld and robotic applications.

In Afghanistan, insurgents have moved to using explosive hazards made of low- or non-metallic components that are more difficult to detect using conventional methods, thus putting soldiers at greater risk of injury or death. Enter **ground penetrating radar (GPR)**, a superior technology that provides a 3-D analysis of objects buried in the ground. Both the **Husky Mounted Detection System (HMDS)** and the **AN/PSS-14 Mine Detecting System** employ GPR. This technology alerts the operator to the threat prior to detonation, greatly reducing the risk of injury to the crew and battle damage to the vehicle or surrounding facilities.

Continuous development to countermeasure technology and equipment provides EOD technicians the ability to access, disrupt and neutralize hazards from increased standoff distances quickly and smoothly. The **MK40 Mod 0 Unexploded Ordnance Standoff Disrupter Tool** allows the EOD soldier to render safe unexploded ordnance (UXO) and IEDs via a percussion-activated projectile from a standoff position. The **EOD PAN Disrupter** is a laser-aimed disrupter that can also be fired from EOD robots.

Product Manager Improvised Explosive Device Defeat/Protect Force

IEDs remain one of the most deadly threats to U.S. servicemembers with every step and mile they travel. Protecting the force from these dangers takes a layered approach to control, monitor, and defend personnel, facilities and vehicles.

Detecting IEDs or threats is the first line of defense. Capabilities such as **Sherlock** and **Fido** explosive detection systems detect potential IEDs, suicide bombers, and other explosive hazards at base entrances, ranges and control points as part of a tiered defense. They provide improved identification and detection capabilities outside the blast range.

Deny systems block enemy access to unauthorized locations and deny them the opportunity to emplace IEDs or other explosive hazards in targeted areas. **Culvert Denial Systems** block unauthorized access to culverts, the devices used to channel water and allow it to pass underneath roads, railways or embankments. These capabilities aim to reduce the security risks for U.S. forces and provide blast mitigation with standoff protection.

Defeat products focus on defensive technologies and capabilities required to conquer IEDs by neutralizing them before they can be detonated or minimizing the effects of IED blasts on personnel, equipment and facilities. The **Jackal Explosive Hazard Pre-Detonation System** triggers IEDs at standoff distance and is modular and adaptable to emerging IED devices and multiple platforms. Jackal was named one of the Army's Greatest Inventions.

Product Directorate Area Denial

PM CCS is redefining how soldiers shape the battlefield and protect the force through continual advances in area-denial capabilities. Area-denial systems and munitions block enemy access to key terrain and restrict the enemy's ability to maneuver freely. These systems include cutting-edge networked munitions and legacy antipersonnel and antivehicle systems. Manportable, these systems provide soldiers faster response time, greater efficiency, and enhanced safety and can be employed to protect perimeters and flanks during attack, reinforce light forces and control enemy movement.

The **XM-7 Spider Networked Munition** is an effective lethal and nonlethal alternative to antipersonnel land mines (APLs). Currently operational in Afghanistan, the system is an advanced, man-in-the-loop (MITL) area-denial system that offers remote-controlled force protection. The system is different from a land mine in that it cannot deliver effects unless commanded to do so, and it can be safely recovered from the field and reused. Spider provides the equivalent munition field effectiveness of current APLs without the residual life-threatening risks after hostilities end or when warring factions depart.

The **M18A1 Claymore** is a directional fragmentation munition that fires metal balls (shrapnel) out to about 100 meters across a 60-degree arc in front of the device.

Husky Mounted Detection System (HMDS)

It is remotely detonated using an electric or nonelectric initiation system and is used to deter enemy pursuit, establish perimeter defenses and conduct ambushes. It can also be used with the Spider System.

Product Directorate Combat Munitions

Having the tactical flexibility to react rapidly and effectively to any scenario ensures success against the varied threats and combat environments U.S. forces face. Combat munitions provide a range of battlefield munitions and escalation of force capabilities that broaden soldiers' options for countering enemy actions. They include shoulder-launched munitions (SLMs), grenades, and nonlethal ammunition and systems.

SLMs provide soldiers the ability to defeat light-armored vehicles and bunkers and enemy personnel. Disposable and highly mobile, improved versions of SLMs such as the **M136A1 AT4 Confined Space (AT4-CS)** can be fired from confined spaces, increasing effectiveness in urban environments. The upgraded **M72 Light Assault Weapon (LAW)** is ideal for the combat environment in Afghanistan, characterized by difficult terrain, long foot patrols and fast-paced operations at close range. Grenades range in effect from nonlethal to lethal and can be hand-thrown or propelled from a launcher. They offer a variety of capabilities—from fragmentation and incendiary to screening and signaling—to the soldier in close-combat situations.

PM CCSs' nonlethal munitions and systems allow soldiers to react with the appropriate level of force based on the threat and serve as the last step in a scalable response—shout, show, shove, shoot. They are vital in urban conflict to limit collateral damage and avoid noncombatant casualties. The **Non-Lethal Capabilities Set (NLCS)** provides a variety of capabilities including checkpoint, dismounted operations, convoy protection and crowd control/detainer operations as well as counter-personnel and counter-materiel systems. The modularity of the NLCS allows the commander to tailor equipment needs based on a specific mission or threat level.

Both the **M1012 12-gauge Nonlethal Point Control Cartridge** and **M1013 12-gauge Nonlethal Area Round** temporarily disorient or incapacitate a targeted individual with nonlethal blunt trauma. They can be fired from a standard issue 12-gauge shotgun, such as the Mossberg 500, Mossberg 590 and Winchester 1200. The **M1029 40 mm Crowd Dispersal Cartridge** and **M1006 40 mm Sponge Grenade** can either be launched from the M203 40 mm grenade launcher or fired from an M16A2/M203 or M4/M203. These nonlethal munitions fill a wide range of possible nonlethal applications, including crowd control and enforcing a buffer zone.

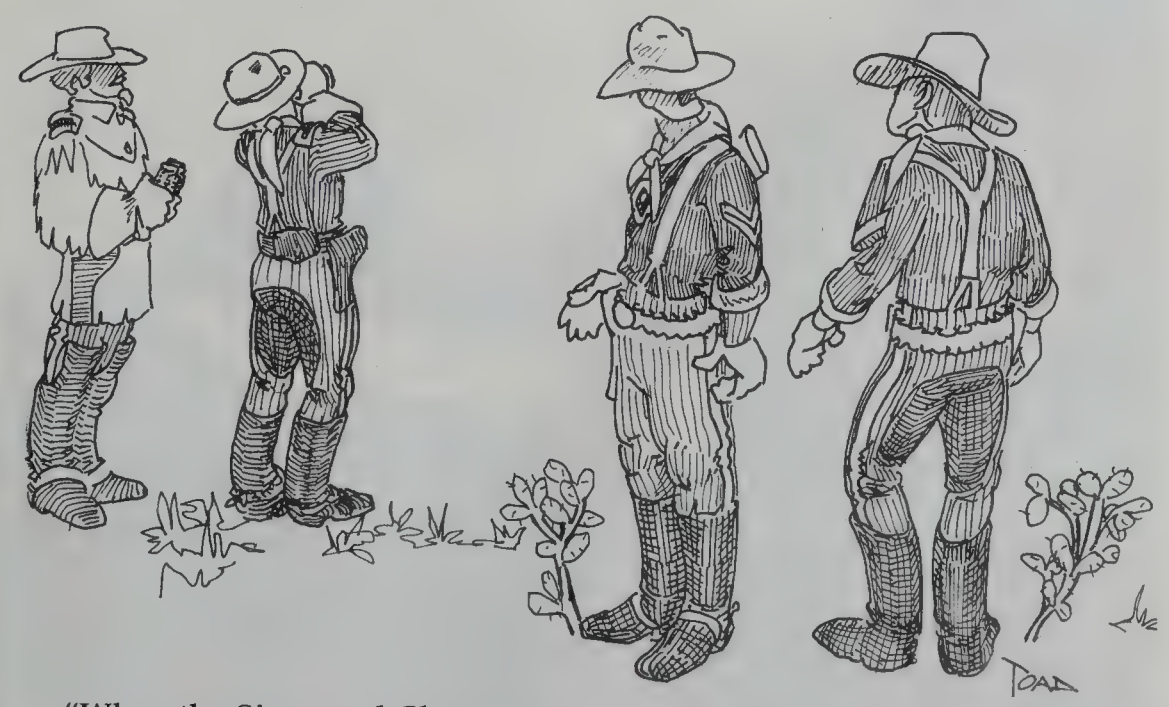
M18A1 Claymore

Product Directorate Support Munitions

PM CCS' Support Munitions—demolitions and pyrotechnics—provide soldiers with enhanced maneuver, communication and illumination capabilities across various missions on the battlefield.

Combat engineers, infantry, explosive ordnance disposal and special operations use demolitions and breeching munitions to clear mines and IEDs, overcome obstacles, and impede enemy movement. Modernization efforts are aimed at making demolitions lighter, more reliable and less sensitive. PM CCS manages a range of demolition items, including the **Modern Demolitions Initiator**, a suite of components used to activate all standard military demolitions and explosives, as well as bulk, shaped and cratering charges. Designed to clear mines and related obstacles for dismounted soldiers and vehicles, the **Anti-Personnel Obstacle Breaching System** is light enough to be carried by two soldiers with backpacks, while the **Mine Clearing Line Charge** is a rocket-projected explosive line charge.

Pyrotechnics include munition flares, signals and simulators. Advanced infrared decoy flares, the **M206**, **M211** and **M212 Air Countermeasure Flares** are used by Army aircraft and helicopters to defeat a range of threats. The family of **Handheld Signals** provides aircraft, distress and troop emplacement signaling as well as battlefield illumination. Battlefield and ground effects simulators, such as the **M115A2 Ground Burst Simulator** and **M116A1 Hand Grenade Simulator**, produce battle noises and effects—shells in flight, ground burst explosions or grenades—for use in training.



"When the Sioux and Cheyenne find out we have a fully integrated tactical network, I'm sure they will pack up and go home."

INDIVIDUAL EQUIPMENT AND WEAPONS

The soldier is the Army's most deployed combat system and the most essential weapon in the Army's arsenal. **Program Executive Office (PEO) Soldier** was activated in October 2002 to equip the soldier as a system through centralized development, acquisition, fielding and sustainment of virtually everything the soldier wears or carries.

PEO Soldier is the first organization in U.S. Army history to be charged with the mission to treat the soldier as a system. All aspects of soldier equipment are integrated, modular, interoperable and mission-tailorable. This focused effort has led to the most lethal and survivable ground force in modern warfare.

Project Manager Soldier Warrior

Project Manager Soldier Warrior (PM SWAR) supports soldiers through the acquisition of integrated soldier systems. Current systems include Nett Warrior (formerly Ground Soldier), Air Soldier, Soldier Power, and Tactical Communication and Protective Systems. Project Manager Soldier Warrior's product managers and directors develop and integrate components into complete systems designed to increase combat effectiveness, decrease combat load and improve mission flexibility.

Product Manager Ground Soldier

Nett Warrior (NW) builds upon Land Warrior as an integrated dismounted soldier situational awareness system for use during combat operations. The system provides unparalleled situational awareness and understanding to the dismounted soldier, allowing faster and more accurate decision making in the tactical fight. Nett Warrior reduces time on target, greatly reducing the risk of fratricide; allows for immediate feedback of battlefield effects; reduces the use of voice communication; clears the fog of battle by displaying a real-time common operating picture (COP); and provides immediate command and control.

The centerpiece capability of NW is the ability to graphically display the individual soldier's location on a digital map. Additional soldiers' locations are also graphically displayed through the Army Battle Command System, connected via a secure radio that sends and receives information. The system also connects the combat soldier to higher-echelon data and information products to assist the soldier in decision making and situational understanding. All of this is integrated in a graphical user interface that is user-defined, allowing soldiers to easily see, understand and interact in the method that best suits the user and his particular mission.

The physical subcomponents of NW include a display to provide the soldier's information, a computer to process and populate the information on the screen, an interface device that allows user interaction with the system, a power source, an operating system to provide the system functionality to run tactical applications and Battle Command, and a networked radio transmitter/receiver device to send and receive information. As an integrated system on the combat soldier, size and weight are kept to a minimum with the ruggedness for combat operations including water immersion. NW has a slim and flexible form factor that can accommodate the shooter's preference method of employing the system with the variety of different mission profiles and soldier configurations.

Air Warrior Electronic Data Manager (EDM)

NW entered the technology development phase in February 2009 and recently achieved Milestone C. During fiscal year (FY) 2012, the program was scheduled to award low-rate initial production contracts.

Product Manager Air Warrior

Air Warrior (AW) is a modular, integrated, rapidly reconfigurable combat aircrew ensemble that saves lives and maximizes Army aircrew mission performance. More than 20,000 Army aircrew members have been equipped with the system. AW increases personal protection and mission performance and consists of a primary survival gear carrier that includes first aid, survival, signaling and communications equipment; body armor tailored for the unique requirements of the aircrew member; the aircrew integrated helmet system including a **Communication Enhancement and Protection System (CEPS)** that provides a helmet hear-through capability; over-water survival equipment, including personal flotation, an emergency escape breathing device, and body-mounted life raft; and the **Microclimate Cooling System (MCS)**, a mix of platform-mounted and soldier-mounted cooling gear that increases mission endurance under extreme heat by more than 350 percent. The MCS has been adopted for use by ground forces including Stryker, Abrams, Bradley, M9 ACE, Navy, Marine Corps and foreign militaries, with more than 16,000 systems fielded to date. The **Portable Helicopter Oxygen Delivery System (PHODS)** is a soldier-worn system that delivers compressed oxygen from a lightweight steel bottle attached to the Air Warrior vest. The system provides oxygen via a nasal cannula up to 18,000 feet and via a mask at altitudes above 18,000 feet. More than 3,000 PHODS have been fielded. The **Electronic Data Manager (EDM)** is a touchscreen, kneeboard computer that enables the aircrew member to quickly plan missions and react to mission changes in flight. The EDM, compatible with night-vision goggles and readable in direct sunlight, features a moving map, Blue Force Tracking, and a new terrain and obstacle avoidance capability expected to achieve airworthiness certification in FY 2012. More than 2,700 EDM systems have been fielded to the Army, Navy, Marine Corps and foreign militaries. The **Encrypted Aircraft Wireless Intercom System (EAWIS)** provides encrypted, hands-free wireless aircrew communications for nonrated aircrew members requiring mobility inside and in the immediate vicinity of the aircraft. EAWIS provides the first true aircraft intercom ca-

pability for medical evacuation helicopter personnel during rescue hoist missions and consists of an aircraft-mounted interface unit and mobile equipment units worn by the crewmember. The **Survival Kit, Ready Access, Modular (SKRAM)** gives aircrews readily accessible carriage of a 72-hour suite of life-support equipment in a flame-retardant, modular and configurable backpack, including supplemental survival gear for extreme environmental conditions.

The **Air Soldier** program formally entered into the engineering and manufacturing development phase in December 2011 with a requirement to reduce aircrew member weight and bulk while improving safety and situational awareness and mission duration. Air Soldier capabilities will be fielded in two increments, with the first delivery of capability in FY 2015, which includes:

Common Helmet Mounted Display System with integrated head tracking, providing all Army aviators (except AH-64 Apache) with critical day/night flight and 3-D Degraded Visual Environment flight symbology (Apache aviators will be equipped in the second increment of Air Soldier); **Lightweight Environmental Control System** delivering a cooling capability to OH-58D aviators previously unavailable due to the space, weight and power constraints inherent in the Kiowa Warrior; and soldier-worn **Integrated Soldier Power and Data System (ISPDS)**—a smart, on-aircraft rechargeable, single source of extended duration power for all aircrew-worn electronics. Developed through teamwork with the Product Director Soldier Power, the ISPDS eliminates the need to wear and carry separate sets and types of batteries and spares.

Air Soldier also includes **Personal Electronics Control and Display System (PECDS)**, consisting of a **Personal Display Module (PDM)**, **Soldier Computer Module (SCM)**, and **Mission Display Module (MDM)**. The **PDM** is worn by the soldier and is the single user interface and dismounted display for all body-mounted electronic equipment. The PDM reduces bulk and weight by eliminating the need for separate hardware control and display components. The **SCM** provides a single processing and data storage device for all soldier-worn electronics and reduces bulk and weight by replacing separate component processors. The aircraft-mounted **MDM** replaces the Air Warrior EDM in the nondigitized rotary-wing fleet and interfaces with platform sensors for mission execution, including situational awareness and command-and-control messaging through Blue Force Tracking. A **Layered Clothing Ensemble (LCE)** introduces an active heating capability and reduces the bulk and weight of the current AW aircrew flexible body armor, cooling vest, chemical/biological protective garment, survival vest components, and cold water immersion protective garments.

Survival Equipment Subsystem (SES)

The second and final delivery of Air Soldier capability in FY 2018 will fully replace the Air Warrior and will include: **Wide Field of View/High Resolution Helmet Mounted Display** incorporating 3-D DVE symbology for AH-64 Apache aviators; **Radio Interface Control Module (RICM)**, which combines the functionality of, and replaces, the soldier-worn Encrypted Aircraft Wireless Intercom System transceiver and Combat Survivor Evader Locator survival radio, and adds a wireless data capability; **Enhanced Laser Eye Protection (ELEP)**, providing increased wavelength protection in a spectacle or visor configuration; **Integrated Protective Ensemble (IPE)**, which fully replaces the legacy Air Warrior gear carriage and body armor system. The IPE reduces weight and bulk by using electrotextile technology to eliminate heavy electrical power/data cabling, eliminating the body-mounted raft, reducing the size and weight of breathing devices, and integrating personal flotation into the IPE.

Product Director Soldier Power

Product Director Soldier Power is a vital enabler for operations, essential for patrols and required for soldier sustainment. Providing energy-alternative capabilities and interoperability builds flexibility and resilience through the increased ability to respond to changes in operational demands and a greater ability to adapt to changes in the operational environment. These capabilities include soldier power sources, power scavenging, renewable energy, power distribution, power management, and power storage solutions that are lightweight and soldier-portable/wearable. The type of gear carried into battle by soldiers in the past had a low power requirement that could be addressed with a small amount of conventional batteries. As technologies mature and new power-consuming systems get added onto the current soldier load, the Army needs to address how to reduce that load and eliminate the logistical footprint associated with battery resupply.

The **Soldier Worn Integrated Power System (SWIPES)** provides a central power source for extended mission duration when used with the ergonomic soldier-worn conformal battery, while reducing the numbers and varieties of batteries carried by the soldier. The SWIPES system can provide power for up to four devices including (but not limited to) a radio via a smart charging pouch, a USB hub to power any USB device, a defense advanced global positioning system (GPS) receiver (DAGR) and an end user device such as Nett Warrior.

The **Soldier Power Manager** is a lightweight, portable power management system that can use power from primary batteries and manage power from solar, vehicle and fuel cell sources.

The **Rucksack Enhanced Portable Power System** is a solar power energy system that can provide power to the individual or team and can be carried in an assault pack.

The **Modular Universal Battery Charger (MUBC)** with a 120-watt solar blanket weighs approximately 6 pounds and brings recharging forward for the entire networked squad in a Tier 1 environment.

This charger will reduce and potentially eliminate the need to return to the forward operating base for recharging. The MUBC will allow the warfighter to extend his mission duration without being tethered to a logistics battery resupply.

The **1KW JP8 Generator** allows the warfighter to use existing logistics infrastructure while providing a lightweight, manportable solution. The Army is developing a multifuel-compatible capability.

The **Conformal Battery** is an ergonomic soldier-worn battery that provides a central source of power for a variety of soldier-worn capabilities. The ergonomic engineering of the conformal battery provides the warfighter with a lightweight power source that shares space with existing equipment on the soldier's combat uniform.

The **Tactical Communication and Protective System (TCAPS)** provides concurrent hearing protection and auditory situational awareness. Historically, soldiers had to choose between hearing protection and force protection. As a combat force multiplier, TCAPS maintains hearing protection while enabling soldiers to use existing tactical radios, resulting in increased mission effectiveness, safety and survivability.

Active hearing-protection technology coupled with hearing-attenuation technology enables soldiers wearing TCAPS to hear in steady-state and impulse environments. TCAPS' ambient-sound capability provides soldiers with localized, 360-degree acoustic situational awareness.

An increase in soldier use of hearing protection devices will result in a reduction of hearing injuries and subsequent post-service disabilities. According to a General Accounting Office (GAO) report, in FY 2009 "some of the most common impairments for veterans receiving disability benefits were hearing-related. Annual payments for such conditions exceeded $1.1 billion."

The Rapid Fielding Initiative is presently issuing an early version of TCAPS to deploying units. The TCAPS program of record will seek to offer a lighter, more interoperable, nonradio-dependent materiel solution. Milestone C is planned for FY 2013.

Project Manager Soldier Sensors and Lasers (PM SSL)

Project Manager Soldier Sensors and Lasers (PM SSL) provides soldier-borne sensors and lasers that enhance the soldier's ability to see and dominate in all battlefield and lighting conditions, to acquire objects of military significance before the soldier is detected, and to target threat objects accurately for engagement by soldiers or guided munitions. These systems provide critical, on-the-ground direct support to U.S. forces.

Product Manager Soldier Maneuver Sensors (PM SMS)

Product Manager Soldier Maneuver Sensors (PM SMS) is responsible for developing and equipping the soldier with sensors and lasers to help dominate the battlefield through improved lethality, mobility, and survivability in all weather and visibility conditions.

The **AN/PSQ-20 Enhanced Night Vision Goggle (ENVG)** provides increased capability by incorporating image intensification and long-wave infrared sensors into a single, helmet-mounted passive device. The ENVG combines the visual detail in low-light conditions provided by image intensification with the thermal sensor's ability to see through fog, dust and foliage that obscure vision. This thermal capability makes the ENVG, unlike earlier night-vision devices, useful during the day as well as at night.

AN/PSQ-20 Enhanced Night Vision Goggle (ENVG)

The **AN/PVS-14 Monocular Night Vision Device (MNVD)** is a head- or helmet-mounted passive device that amplifies ambient light and very near infrared energy to enable night operations. The system is designed for use in conjunction with rifle-mounted aiming lights.

The **AN/AVS-6 Aviator's Night Vision Imaging System (ANVIS)** is a third-generation, helmet-mounted, direct-view, image-intensification device that enables aviators to operate more effectively and safely during low-light and degraded battlefield conditions. The low-light sensitivity represents a 35 to 40 percent improvement over the earliest ANVIS. In addition, the gated power supply enables operation at significantly higher light levels than any of the previous designs.

The **AN/PAS-13 Thermal Weapon Sight (TWS)** gives soldiers with individual and crew-served weapons the capability to see deep into the battlefield, increase surveillance and target acquisition range, and penetrate obscurants, day or night. The TWS systems use uncooled, forward-looking infrared (FLIR) technology and provide a standard video output for training or remote viewing. Thermal weapon sights are lightweight systems that are mountable onto each weapon's rail and operate to the maximum effective range of the weapon. In 2013, deliveries of TWS will include 17 micron technology, which will result in size, weight and power improvements over present configurations.

The TWS family includes three variants: The AN/PAS-13(V)1 Light Weapon Thermal Sight (LWTS) for the M16 and M4 series rifles and carbines, as well as the M136 Light Anti-Armor Weapon; the AN/PAS-13(V)2 Medium Weapon Thermal Sight (MWTS) for the M249 Squad Automatic Weapon and M240B series medium machine guns; and the AN/PAS-13(V)3 Heavy Weapon Thermal Sight (HWTS) for the squad leader's weapon M16 and M4 series rifles and carbines, M24 and M107 sniper rifles, and M2 HB and Mk 19 machine guns.

The **Family of Weapon Sights (FWS)** program will provide soldiers with networked individual, crew-served, and sniper weapons sensor capability, allowing for significantly reduced target engagement times, increased identification ranges, and reduced weight during all visibility conditions. The FWS systems will use uncooled FLIR technology, digital low-light level technologies, and additional features to provide improved offensive firing capabilities, decreased transition time between mobility and targeting sensors, and improved firing accuracy.

The FWS will have three variants: the **Family of Weapon Sights Individual (FWSI)** for the M16 and M4 series rifles and carbines, the M249 Squad Automatic Weapon, the M136 Light Anti-Armor Weapon and M141 Bunker Defeat Munitions; the **Family of Weapon Sights Crew Served (FWSCS)** for the M240B series medium machine guns, the M2 HB and Mk 19 machine guns; and the **Family of Weapon Sights Sniper (FWSS)** for the M110, M107 and XM2010 sniper rifles.

The **AN/PVS-30 Clip-On Sniper Night Sight (CoSNS)** is a lightweight, in-line, weapon-mounted sight used in conjunction with the day optic sight on the M110 SASS and the XM2010 Enhanced Sniper Rifle (ESR). It employs a variable gain image tube that can be adjusted by the sniper depending on ambient light levels. When used in conjunction with the M110 or XM2010 day optical sight, it provides for personnel-sized target recognition at quarter-moon illumination in clear air to a range of 600 meters. The CoSNS has an integrated rail adapter that attaches directly to the MIL-STD-1913 rail for quick and easy mounting to or dismounting from the weapon. Use of the CoSNS does not affect the zero of the day optical sight and allows the M110 SASS and XM2010 to maintain bore sight throughout the focus range of the CoSNS and the weapon system's day optical sights.

The **Multifunction Aiming Light (MFAL)** family includes the AN/PEQ-15 Advanced Target Pointer Illuminator Aiming Light (ATPIAL) and the AN/PEQ-15A Dual Beam Aiming Laser-Advanced2 (DBAL-A2). The AN/PEQ-15 and AN/PEQ-15A class 3B MFAL devices replace the AN/PAQ-4C. The infrared (IR) and visible aiming lasers are co-aligned. The visible laser can be used to bore-sight the device to a weapon without the need of night-vision goggles. The IR lasers emit a highly collimated beam of IR light for precise weapon aiming, as well as a separate, IR-illuminating laser with adjustable focus. A visible red-dot aiming laser can also be selected to provide precise aiming of a weapon during daylight or night operations. AN/PEQ-15 and AN/PEQ-15A IR lasers can be used as handheld illuminator pointers or can be weapon-mounted with included hardware. These units can be used with night-vision equipment to allow engagement of enemy targets at night.

The **AN/PEQ-14 Integrated Laser White Light Pointer (ILWLP)** is a small, lightweight device that can be handheld or mounted on the M9 pistol with a MIL-STD-1913 rail adapter and combines the functions of a white-light flashlight with adjustable focus, visible aiming laser, infrared aiming laser, and IR illuminator into one system. The ILWLP is used to engage targets with the M9 pistol on the battlefield and in close-quarters combat engagements. It is fielded to military police units.

AN/PED-1 Lightweight Laser Designator Rangefinder (LLDR)

The **LA-8/P Aircrew Laser Pointer (ALP)** is a finger-mounted laser that has the capability to direct fires, identify friend and foe, and signal adjacent formations during night operations. It is mounted on a fire-resistant fabric designed to attach to the aircrew member's glove. Because it is worn on the hand, it does not interfere with aircraft operation. The master arming switch allows a high-power (Class IIIb) or low-power (Class I) infrared laser operation. A momentary fire button allows easy activation with the thumb to light an LED. The ALP incorporates a laser diode that projects a pinpoint beam that is brighter and more defined than other lasers.

The **Green Laser Interdiction System (GLIS)** is a rifle-mounted laser that allows the soldier to interdict hostile actions through nonlethal effects. It is used to divert, disrupt or delay potential threats before they can engage friendly forces. It is also an effective, nonlethal means to warn civilians that they are approaching a zone of military operations.

Product Manager Soldier Precision Targeting Devices (PM SPTD)

Product Manager Soldier Precision Targeting Devices (PM SPTD) is responsible for developing and equipping the soldier with manportable precision targeting systems (locators, designators and entry devices) for the joint force scout, forward observer, and joint terminal attack controller for use across the full spectrum of operations.

The **AN/PED-1 Lightweight Laser Designator Rangefinder (LLDR)** provides dismounted fire support teams, combat observation and lasing teams, and scouts with a precision target-location and laser-designation system that allows them to call for fire using precision, near-precision and area munitions. It is a crew-served, manportable, modular target locator and laser designation system. The primary components are the **Target Locator Module (TLM)** and the **Laser Designator Module (LDM)**. The TLM incorporates a thermal imager, day camera, laser designator spot imaging, electronic display, eye-safe laser rangefinder, digital magnetic compass, selective availability/anti-spoofing module global positioning system (SAASM GPS), and digital export capability. A new compact laser designator is being fielded with the LLDR 2, which requires less power and operates on one common single-channel ground and airborne radio system (SINCGARS) battery (BA-5390 or BA-5590). To provide a precision targeting capability to the dismounted soldier, PM SPTD has developed the LLDR 2H, which integrates a celestial navigation system with the digital magnetic compass in the TLM to provide highly accurate target coordinates. The TLM can be used as a stand-alone device or in conjunction with the LDM. During day operations, targets can be recognized at more than 7 kilometers. At night and in obscured battlefield conditions, the operator can recognize vehicle-sized targets at more than 3 kilometers. The LDM emits coded laser pulses compatible with DoD and NATO laser-guided munitions. Targets can be designated at ranges greater than 5 kilometers.

The **Laser Target Locator (LTL)** has the mission of providing daylight and limited night capabilities to accurately locate targets and transmit target data. These are commercial off-the-shelf, handheld or tripod-mounted, lightweight laser target lo-

cators designed to deliver target data to the fire support and maneuver command, control, communications, and intelligence system (C4I).

The **Vector 21** is a binocular laser rangefinder (BLRF) with an embedded digital compass. It can be used in combination with the AN/PVS-14 NVG for limited night capability. Combined with a precision lightweight GPS receiver or a defense advanced GPS receiver, the system can compute and display target locations.

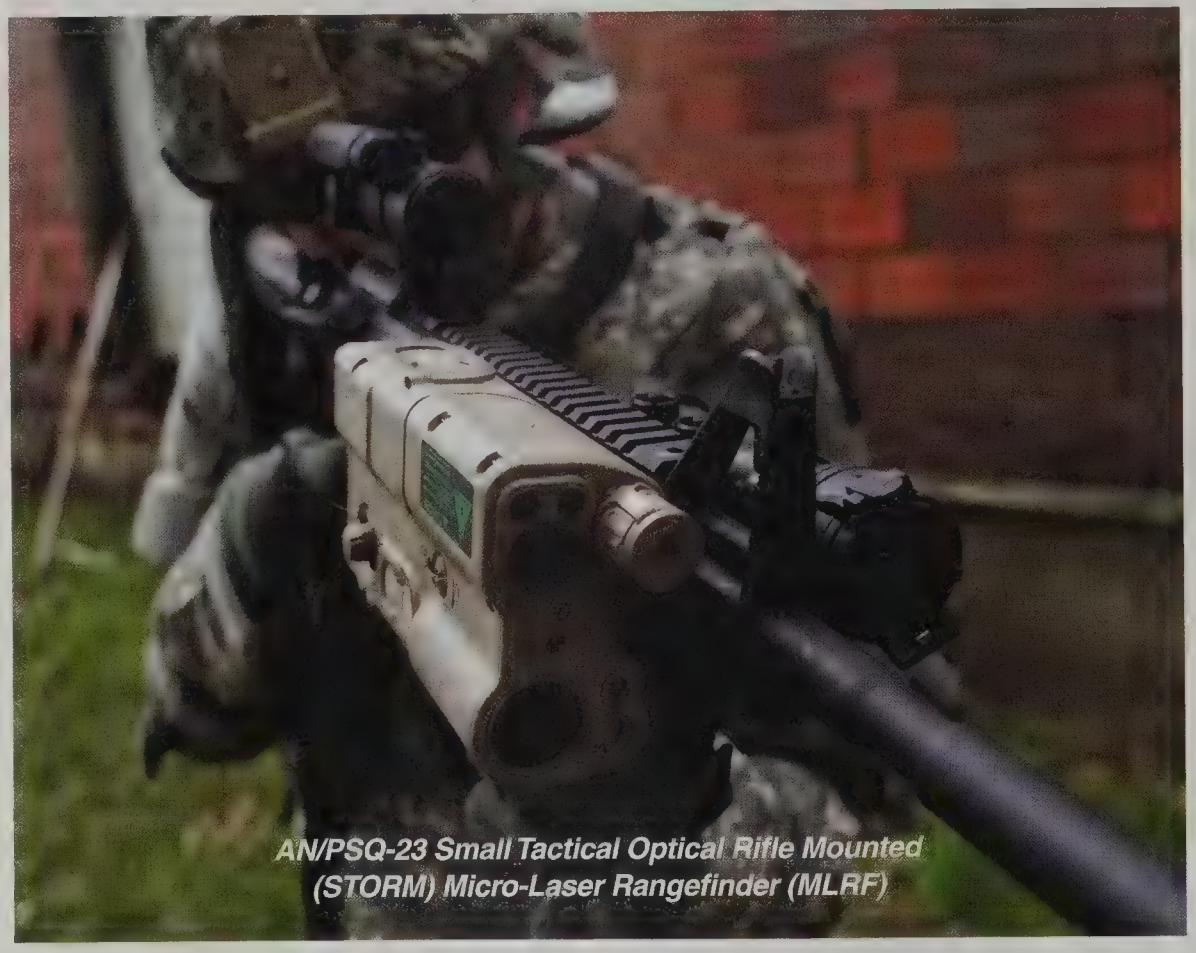
The **Mark VII** integrates a monocular direct view optic, an image intensifier, a laser rangefinder and a digital compass into a day/night target location device. The MARK VII provides a limited night capability. Combined with a precision lightweight GPS receiver or a defense advanced GPS receiver, the system can compute and display target locations.

The **Mark VIIE** is an improved Mark VII, which adds to all the Mark VII's capabilities a more powerful 8x day optic, an uncooled thermal sight for increased night performance, and an embedded GPS receiver for greater accuracy.

The **TRIGR** incorporates a 7x direct view optic, an improved uncooled thermal sight for increased sight range, a laser rangefinder, a digital compass and GPS that allows the system to determine target location.

The **Joint Effects Targeting System (JETS)** provides the dismounted forward observer and joint terminal attack controller the ability to acquire, locate, mark and designate for precision GPS-guided and laser-guided munitions, and provides connectivity to the joint forces through fire mission close air support digital planning/messaging devices. JETS is an Army-led, joint program with the Air Force and Marine Corps to develop and field a one-man portable targeting system for forward observers and joint terminal attack controllers.

The **AN/PSQ-23 Small Tactical Optical Rifle Mounted (STORM) Micro-Laser Rangefinder (MLRF)** is a lightweight, multifunctional laser system designed to operate on individual and crew-served weapons, the Stryker Remote Weapons Station, and the Common Remotely Operated Weapons Station. It combines the functionality of a laser rangefinder, the AN/PEQ-2A Infrared Aiming Laser and Illuminator, the Multiple Integrated Laser Engagement System, a digital compass, and a visible pointer into a single system. Combined with a precision lightweight GPS receiver or a defense advanced GPS receiver, the system can compute and display target locations.



AN/PSQ-23 Small Tactical Optical Rifle Mounted (STORM) Micro-Laser Rangefinder (MLRF)

Project Manager Soldier Protection and Individual Equipment (PM SPIE)

Project Manager Soldier Protection and Individual Equipment (PM SPIE) develops and fields advanced soldier protection products, uniforms that enhance mission effectiveness, and improved parachute systems. These products are designed to protect soldiers and enable them to operate in any conditions.

Product Manager Soldier Clothing and Individual Equipment (PM SCIE).

Soldiers wear different uniforms depending on where they are or the duty they are performing. All Army combat uniforms will have a standardized insect repellent treatment called permethrin. This treatment to the uniform adds additional protection against flying and crawling insects.

The **Army Combat Uniform (ACU)** and **Flame Resistant Combat Uniform (FRACU)** consist of a jacket, trousers, patrol cap, moisture-wicking T-shirt and Army combat boot (temperate and hot weather) or the mountain combat boot for rugged terrain.

After receiving soldier feedback, in February 2010, the Army announced that it was changing the operational camouflage pattern for Afghanistan from the pixelated Universal Camouflage Pattern (UCP) to the **Operation Enduring Freedom Camouflage Pattern (OCP)**. OCP was selected for its effectiveness in the varied visual environments found in Afghanistan.

Soldiers who deployed in late August 2010 were the first to receive the new camouflage uniform, while soldiers in theater received them that fall. Beginning in August 2012, the OCP uniforms included an improved fabric and several design changes that make them more durable in the rugged terrain and easier to wear.

Along with changes in blouses and trousers, there have been some changes in the headgear that can be worn with this uniform. Effective June 2011, the patrol cap that matches the ACU is the primary headgear for this duty uniform, but at the commander's discretion, the black beret can be worn instead.

The **Army Service Uniform (ASU)** is a traditional uniform that fully embodies the imperatives of utility, simplicity and quality. The ASU presents a distinctive appearance that readily identifies a soldier to the American public. Army blue, green and white service uniforms have been streamlined to one blue uniform as part of an evolutionary process to reduce the number of Army dress uniforms. Army blue as a uniform color traces its origins back to the national blue of the U.S. flag and was first mandated for wear by soldiers in the Continental Army of 1779.

The ASU provides a basic set of components that allow soldiers to dress from the lowest end to the highest end of service uniforms with little variation required. The ASU eliminates the need for numerous sets of green Class A uniforms, dress blue uniforms and, for some, dress white uniforms. Streamlining various dress uniforms into one ASU reduces the burden on soldiers in the same manner that the ACU did for the field utility uniform.

The ASU includes a coat and low-waist trousers for male soldiers, and a coat, slacks and skirt for female soldiers. The fabric of the ASU consists of a 55 percent wool and 45 percent polyester blend, which is heavier and more wrinkle-resistant than the present commercially avail-

able blue uniform. The new ASU coat has an athletic cut to improve fit and appearance, and includes an improved heavier and wrinkle-resistant short- and long-sleeved white shirt with permanent military creases and shoulder loops.

The primary headgear for the ASU is the beret. Officers and enlisted soldiers will be required to have both the service cap and the beret by the mandatory possession date. Commanders have the discretion to determine if corporals and above wear either the service cap or the beret. The current black accessories, such as the windbreaker, all-weather coat, overcoat and sweaters, may be worn with the ASU.

In addition to the clothing changes, the ASU will allow soldiers to wear the new Combat Service Identification Badge (CSIB) to honor the heritage and traditions of combat service. The CSIB replicates the former Wartime Service Shoulder Sleeve Insignia on the ACU. In addition, the green leaders tab is not authorized for wear on the ASU.

The blue ASU was introduced to military clothing sales stores in the fourth quarter of FY 2007. The Army introduced the ASU into soldiers' clothing bags at initial-entry training in FY 2010. The mandatory possession date for the ASU for all soldiers is the fourth quarter of FY 2014.

Product Manager Soldier Protective Equipment

Product Manager Soldier Protective Equipment (PM SPE) increases the warfighter's lethality and mobility by optimizing soldier protection while effectively managing all life-cycle aspects of personal protective equipment.

Interceptor Body Armor (IBA) is a joint-service item designed and developed to incorporate the requirements of the Army and Marine Corps. Interceptor is the model name for a modular, multiple-threat body armor system consisting of a base tactical vest and modular components, with small-arms protective inserts designed to defeat multiple ballistic hazards across the battlefield continuum. The **Improved Outer Tactical Vest (IOTV)** is a side-opening vest that can be donned over the head or right shoulder. An internal waistband is incorporated inside the vest for increased stability. The vest provides fragmentation and handgun protection. The IOTV consists of a groin protector, front yoke and collar, lower back protector and deltoid protector. The IOTV integrates with all modular lightweight load-carrying equipment (MOLLE) components and incorporates a quick-release system for emergency doffing. Since the inception of the IOTV, there have been numerous upgrades to the vest due to warfighter feedback. All these improvements have enhanced the form, fit and functionality of the system. The **Deltoid and Auxiliary Protector (DAP)** is a component of IBA that provides additional fragmentation and handgun protection to the upper arm and underarm areas. The DAP was developed as an add-on to the OTV to protect soldiers from the threat of improvised explosive devices in current operations. This auxiliary protective capability is not required for the IOTV, as it is already integrated. The **Enhanced Small Arms Protective Insert (ESAPI)** plates provide multiple-hit protection to the chest and back against various small-arms threats. The **Enhanced Side Ballistic Insert (ESBI)** plates provide additional ballistic protection for the soldier's sides, which are not covered by ESAPI. The ESBI can also withstand small-arms hits from the same threats the ESAPI defends against. The **X-Threat Small Arms Protective Insert (XSAPI)** plate was designed to meet short-term emerging threats and provide additional ballistic protection against more lethal small-arms rounds. The **X-Threat Side Ballistic Insert (XSBI)** plates provide ballistic protection for the soldier's sides, which are not covered by XSAPI. The XSBI can also withstand small-arms hits from the same threats the XSAPI defends against. The IOTV includes integrated ESBI/XSBI side-plate carriers, which reduces redundant overlapping soft armor protection and decreases overall weight.

Interceptor Body Armor (IBA)

The **Soldier Plate Carrier System (SPCS)** is a lightweight, flexible vest that provides a comfortable and secure fit with the capacity to accommodate hard body armor plates. It is designed to accommodate the ESAPI, XSAPI, ESBI, and XSBI hard armor ballistic plates. Specific characteristics include a MOLLE webbing on the front and back of the carrier for mounting of MOLLE components; compatibility with other equipment (Nett Warrior, rucksack and tactical assault panel—without impeding the ability to shoulder a weapon); easy don and doff capability; an increased range of sizes to ensure a comfortable fit for soldiers with the appropriate size ballistic plates inserted; wiring integration; drag strap for casualty removal capability; durability; and availability in OCP. An optional cummerbund has been added as a result of feedback received from soldiers in the field.

The legacy **Concealable Body Armor (CBA)** is intended to be worn by soldiers in military police units, corrections, confinement and law-enforcement operations, Department of Defense investigative and security components, and other U.S. military forces. The CBA offers ballistics protection NIJ Level IIIA. The CBA provides maximum torso coverage while maintaining comfort and the ability to conceal.

The **Family of Concealable Body Armor (FoCBA)** program will replace the legacy CBA. The FoCBA will standardize the CBA for all Army components and a portion of the DoD police force. The FoCBA provides two types of vest protection based on the operating environment or mission. The Type 1 vest will provide Level IIIA ballistic protection to the NIJ 0101.06 standard and stab protection to Level I of the NIJ 0115.00 standard. The Type 2 vest will provide stab protection that will meet NIJ 0115.00 standard for Level III stab protection (California ice pick, single-edged blades, and dou-

Advanced Bomb Suit (ABS)

ble-edged blades), while meeting additional Army requirements. These vests will allow for increased mission effectiveness by providing improved protection and a selection based on the operational environment.

The **Pelvic Protection System (PPS)** is a two-tiered system composed of a Tier I protective under garment (PUG) and a Tier II protective outer garment (POG). The PUG is a system worn next to the skin designed to stop small fragments, reduce the penetration of dirt in wounds and minimize the risk of infection from fine debris. The POG is a system worn over the ACU and, in conjunction with the Tier 1 PUG, designed to reduce penetrations of larger threats and debris. The POG provides ballistic protection similar to that of the Improved Outer Tactical Vest (IOTV).

The **Advanced Combat Helmet (ACH)** comes in five shell sizes (small, medium, large, extra large, and extra-extra large) and includes a modular pad suspension system, retention system and ballistic nape pad. The modular pad suspension system improves blunt-force impact protection, stability and comfort. The cotton/polyester retention system, a four-point design, allows for quick adjustment for head size. The ballistic nape pad attaches to the retention system, improving comfort and stability and providing protection against small arms and fragmentation threats to the nape area of the neck. The ACH weighs 2.9 to 3.8 pounds, depending on size. The helmet cover is available in UCP and OCP.

The **Enhanced Combat Helmet (ECH)** improves ballistic protection, stability and comfort without adding weight or degrading the soldier's hearing and field of vision. The ECH provides increased protection against ballistic and fragmentation threats. The ECH uses advanced thermoplastic materials that require different manufacturing processes from those associated with resin-impregnated para-aramids. The ECH weighs from 2.8 pounds (for a size small) to 4.0 pounds (for a size large). The helmet cover is available in UCP or OCP.

The **Helmet Sensor (HS) GEN II** is a small, lightweight, low-power sensor suite that mounts inside the Advanced Combat Helmet or combat vehicle crewman helmet to record traumatic incidents such as IED explosions or vehicle accidents and document the forces exerted by those incidents on the soldier's head. Soldiers sometimes appear to go through traumatic incidents unscathed, only to later develop symptoms of mild traumatic brain injury. The helmet sensors measure and record G forces exerted on six different axes and also collect information on overpressure. This goes into a database that compiles many such incidents and can be cross-correlated with medical records and reports to help researchers determine if there is a link between brain injuries of various types and the forces exerted on the soldier's head. This database of incidents and medical outcomes will help the Army medical community establish a body of knowledge for development of an objective head exposure monitor and rapid head injury screening tool.

The **Military Combat Eye Protection (MCEP)** program is an umbrella program geared toward protecting soldiers' eyes from external threats and hazards such as ballistic fragmentation, electromagnetic radiation, sand, wind, and dust during day and night missions. The MCEP provides eye protection for both prescription and nonprescription wearers in a variety of commercial styles and sizes. Given this variety of eyewear, soldiers can choose the best eyewear for their mission while still maintaining military standards for eye protection.

The **Advanced Bomb Suit (ABS)** protects explosive ordnance disposal (EOD) soldiers against ordnance and IEDs. This system uses new materials technology and design to provide protection, comfort, and ergonomic efficiency. The ABS ensemble consists of the EOD 8 bomb suit and EOD 9 helmet. The bomb suit is a full-body ensemble that protects from fragmentation, blast overpressure, impact, heat and flame. To minimize weight and maximize flexibility, fragmentation protection is provided at various levels specific to body regions, based on wounding potential. Blast overpressure protection is provided to the front of the thorax. Impact protection is provided to the head and spine. Heat and flame protection are provided by resistant materials. The suit includes an ice-based cooling system to extend mission duration. A hand-protection module provides increased protection. The system can be removed in less than 30 seconds. All ballistic inserts are removable to facilitate laundering and repair. The system is equipped with provisions that allow for future communications, performance and capability upgrades.

Project Manager Soldier Weapons (PM SW)

Project Manager Solder Weapons (PM SW) ensures that soldiers have battlefield dominance in individual and crew-served weapons capabilities. PM SW supports soldiers through the development, acquisition, fielding and sustainment of current and future weapons systems and associated target acquisition/fire control products. As a result of PM SW's efforts, soldiers benefit from continuous improvement programs and are equipped with systems that enhance their lethality and survivability. Two product managers under PM SW drive the mission: Product Manager Individual Weapons (PM IW) and Product Manager Crew Served Weapons (PM CSW).

Product Manager Individual Weapons (PM IW)

Product Manager Individual Weapons (PM IW) is responsible for current and future rifles, carbines, pistols, shotguns, grenade launchers, sniper systems, airburst weapons and related target acquisition/fire control products.

The **XM25 Individual Semi-Automatic Airburst System (ISAAS)** is the U.S. Army's latest developmental weapon designed to address the problem of defeating enemies behind cover, defilade and ex-

posed targets at ranges and accuracies not seen in today's small arms by firing 25 mm high-explosive airburst (HEAB) munitions. The XM25 incorporates full-solution target acquisition/fire control that integrates a thermal sight, 2x direct-view optics, a laser rangefinder, compass, fuze setter, ballistic computer and internal display.

The **M4/M4A1 5.56 mm Carbine** is designed for lightness, speed, mobility and firepower and is standard issue for brigade combat teams. Throughout more than 10 years of sustained combat operations, the M4 has proven itself an effective weapon system that serves soldiers extremely well. The system is 1 pound lighter and more portable than the M16 series of rifles. The M4 series of carbines can also be mounted with the M203A2 Grenade Launcher, M320 Grenade Launcher or M26 Modular Accessory Shotgun System. The weapon has received many performance-based design improvements since its inception. The Army authorized the upgrade of all M4s to the M4A1 configuration in September 2010. The M4A1 has full automatic capability, an ambidextrous fire selector and a slightly heavier barrel that increases the sustained rate of fire.

The **M16A2/A4 Series 5.56 mm Rifle** is the most prevalent combat rifle in the U.S. Army inventory. It is a gas-operated, air-cooled, shoulder-fired weapon that can be fired either in automatic three-round bursts or semiautomatic single shots. The M16A2 has an integral rear sight, while the M16A4 includes a military standard (MIL-STD) 1913 upper receiver and forward rail system with a backup iron sight. Both systems can accommodate modern optics and accessories, as well as configurations that incorporate M203 and M320 40 mm grenade launchers.

The **M320 Grenade Launcher** enables soldiers to accurately engage the enemy in daylight or total darkness out to 350 meters with 40 mm low-velocity grenades. The M320 will replace all M203 series grenade launchers mounted on the M16/M4 series of rifles and carbines. The weapon includes a side-loading unrestricted breech that permits the system to fire longer 40 mm projectiles (NATO standard and nonstandard) and also features the enhanced safety of a double-action trigger/firing system.

The **M26 12-Gauge Modular Accessory Shotgun System (MASS)** provides soldiers with a 12-gauge shotgun accessory attachment with lethal, less-than-lethal and door-breaching capabilities. The system attaches underneath the barrel of the M4 Carbine and provides a capability equivalent to a stand-alone shotgun without carrying a second separate weapon. The M26 can also be converted without tools to operate in a stand-alone mode. The Army began fielding the M26 to select engineer and MP units in 2012.

The **M107 Semi-Automatic Long Range Sniper Rifle (LRSR)** fires .50-caliber ammunition and is capable of delivering precise, rapid fire on targets out to 2,000 meters. It is especially valuable during military operations in urban terrain, where greater firepower and standoff ranges provide counter-sniper capability while enhancing sniper survivability.

The new **XM2010 Enhanced Sniper Rifle (ESR)** is a fully upgraded M24 Sniper Weapon System that has been rechambered to fire .300 WinMag ammunition. The bolt action, magazine-fed system provides precision fire on targets at ranges 50 percent farther than existing 7.62 mm sniper systems. The XM2010 is equipped with a suppressor and a fully adjustable right-folding chassis system featuring a monolithic MIL-STD 1913 accessory rail and accessory cable routing channels. The shooter interface can be tailored to accommodate a wide range of shooter preferences. The XM2010 is fielded with a Leupold Mark 4 6.5 to 20x50 mm extended range/tactical riflescope with a scalable ranging and targeting reticle and an AN/PVS-29 Clip-on Sniper Night Sight. The Army fielded the XM2010 to all sniper teams operating in Afghanistan in 2011.

The **M110 Semi-Automatic Sniper System (SASS)** is the U.S. Army's medium-caliber sniper rifle that supplements the sniper's role to support combat operations with greater firepower and versatility. The 7.62 mm SASS brings a semiautomatic capability to sniper teams and is particularly effective in urban areas where there are multiple targets and frequent close-combat situations. The M110 comes with a suppressor and incorporates a 3.5x10 scope with illuminated mil-reticle. It also comes with the **M151 Enhanced Spotting Scope,** which allows recognition and identification of targets at long distances. With powerful and bright optics, the spotting scope has 12 to 40x magnification with a 60 mm objective lens diameter. The scope has a Leupold mil dot (round dot) reticle for both range estimation and tactical collaboration with the shooter. The scope is weatherproof and fogproof.

The **M14 7.62 mm Enhanced Battle Rifle (EBR)** provides infantry squads operating in Afghanistan with interim capability to engage enemy targets beyond the range of M4 Carbines and M16 Rifles. The weapon is air-cooled, gas-operated and magazine-fed. It is a modern M14 rifle mated to an enhanced aluminum billet stock, tactical scope and cantilever mount. The rifle is effective in close-quarters combat and in the conceptual squad designated marksman role.

The **M9 9 mm Pistol** enhances lethality and survivability in close combat situations via a pistol with rail-attachment capabilities. It is the primary sidearm of the crew-served weapon crewmembers and others who have a personal defense requirement, such as law-enforcement personnel, unit leaders and aviators.

M320 Grenade Launcher

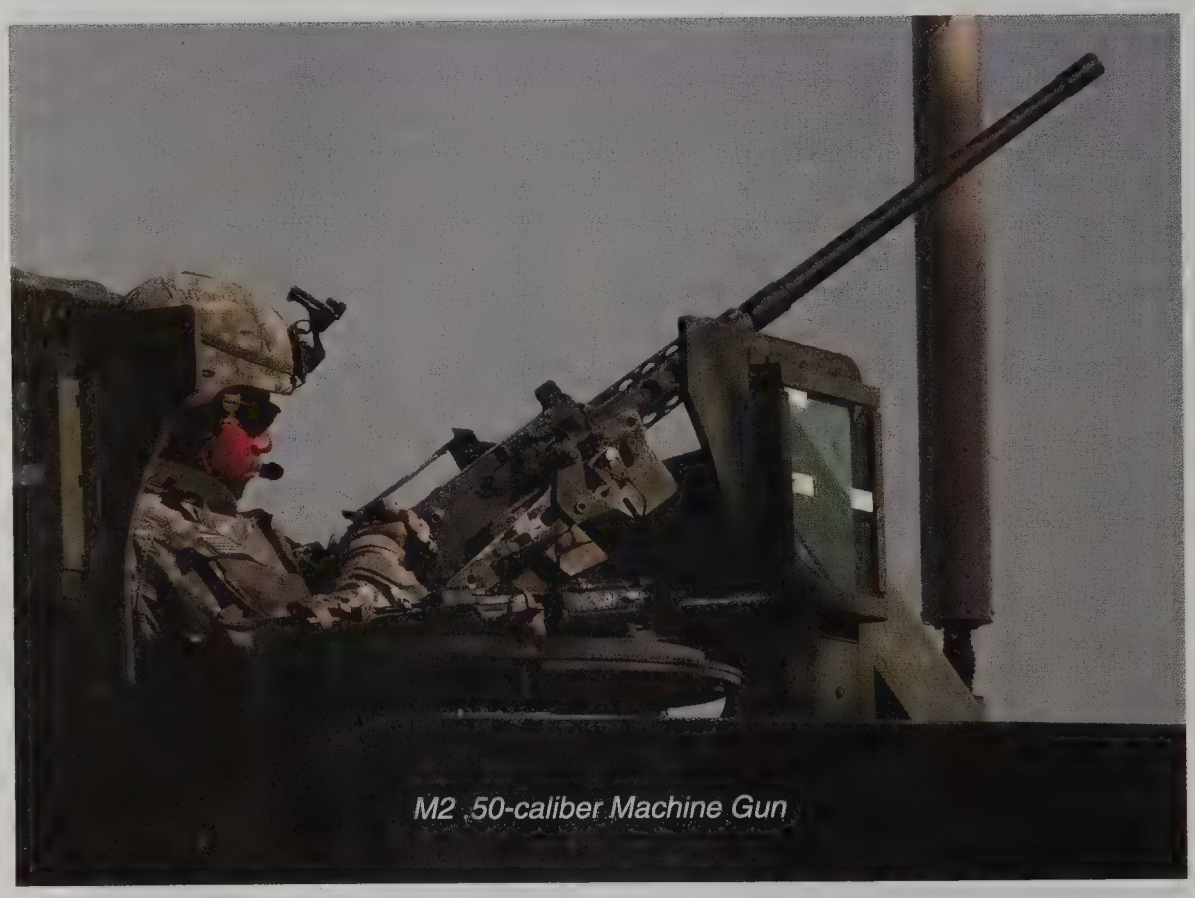
The **M68 Close Combat Optic (CCO)** is a red-dot aiming device that enhances target acquisition speed, allowing soldiers to engage targets up to 300 meters with both eyes open to maintain situational awareness. The sight has no magnification and can be used

with all current night-vision enhancements.

The **M150 Rifle Combat Optic (RCO)** is a rugged, battery-free, 4x magnified optic that provides full mission profile optical capability for use on the M4/M16/M249 weapon systems. Enhanced capabilities provided by the M150 RCO include range estimation, which, along with the bullet drop compensated reticle, provides accurate target engagements out to 800 meters for trained operators.

Product Manager Crew Served Weapons (PM CSW)

Product Manager Crew Served Weapons (PM CSW) is responsible for current and future light and heavy machine guns, grenade launchers, related target acquisition/fire control products and remote weapons systems.



M2 .50-caliber Machine Gun

The **M153 Common Remotely Operated Weapon Station (CROWS)** provides soldiers with the ability to acquire and engage targets while protected inside an armored vehicle. CROWS is a stabilized mount that contains a sensor suite and fire control software, allowing on-the-move target acquisition and first-burst target engagement. Capable of target engagement under day and night conditions, the CROWS sensor suite includes a daytime video camera, thermal camera and laser rangefinder. CROWS is designed to mount on any tactical vehicle and supports the Mk 19 40 mm grenade machine gun, M2 .50-caliber machine gun, M240B 7.62 mm machine gun, and M249 5.56 mm squad automatic weapon.

The **Mk 19 40 mm Grenade Machine Gun (GMG)** is an air-cooled, belt-fed, blowback-operated fully automatic weapon system. It has a maximum effective range of 2,212 meters for area targets and 1,500 meters for point targets. It fires standard high-velocity 40 mm grenade cartridges, including M383 high-explosive antipersonnel rounds, high-explosive dual-purpose (antipersonnel and armor-piercing) rounds, and training practice rounds. The Mk 19 supports the soldier in offensive and defensive roles by delivering a heavy volume of accurate and continuous firepower against enemy personnel and lightly armored vehicles. It can be mounted on a tripod or on multiple vehicle platforms and is the primary suppressive weapon for combat support and combat service support units.

The **M2 .50-caliber Machine Gun** is automatic, belt-fed, recoil-operated and air-cooled. The battle-proven system mounts on the M3 tripod and on most vehicles while also serving as an antipersonnel and antiaircraft weapon. It is highly effective against light armored vehicles, low- and slow-flying aircraft, and small boats. The M2 provides automatic weapon suppressive fire for offensive and defensive purposes. It is capable of single-shot (ground M2 machine gun) and automatic fire. In post-combat surveys, soldiers rated the M2 among the most effective weapon systems in their small-arms arsenal.

The **M2A1 with Quick-Change Barrel** and fixed headspace and timing is an enhancement to the M2 .50-caliber machine gun, offering soldiers increased performance and design improvements that make it easier and safer to use. The M2A1 speeds target engagement and improves survivability and safety by reducing the time required to change the barrel and eliminating the need to manually adjust headspace and timing. The M2A1 also provides a flash hider that reduces muzzle flash by 95 percent, making the weapon less detectable in darkness. The Army began fielding the M2A1 in 2011 and plans to upgrade its entire fleet of 45,000 M2s to the M2A1 standard.

The **M240B 7.62 mm Medium Machine Gun** is a ground-mounted, gas-operated, crew-served machine gun. The cyclic rate is 550 to 650 rounds per minute, and the weapon's maximum effective range against area targets is 1,800 meters. It comes with an accessory rail integrated with the top cover that is used to attach sighting devices. It is issued to infantry, armor, field artillery and combat engineer units that require medium-support fire.

The **M240L 7.62 mm Medium Machine Gun (Light)** weighs approximately 5 pounds less than the existing M240B, while meeting all of its reliability and operational characteristics. The M240L incorporates titanium construction and alternative manufacturing methods to achieve its weight savings. These improvements reduce the soldier's combat load while the weapon system's short barrel and collapsible buttstock configuration allow easier handling and movement of the weapon. Designated an Army's Greatest Invention of 2010, the M240L is rugged and reliable and has a minimum 50,000-round receiver life.

The **M240H 7.62 mm Machine Gun (Aviation Version)** is designed for aviation application and demonstrates reliability equal to that of the M240B. It delivers two minutes of continuous suppressive fire and is removable for use in a ground role. It replaces the M60D machine gun for the UH-60 Black Hawk and CH-47 Chinook helicopters as part of their defensive armament systems.

The **M249 5.56 mm Squad Automatic Weapon (SAW)** serves as an automatic rifle and light machine gun for infantry squads. The M249 SAW is an air-cooled, belt-fed, 5.56 mm weapon with fixed headspace and a quick-change barrel. The weapon can be fired from the shoulder, bipod/tripod-mounted or vehicle-mounted position. It replaced the M16 rifle in the squad automatic rifle role.

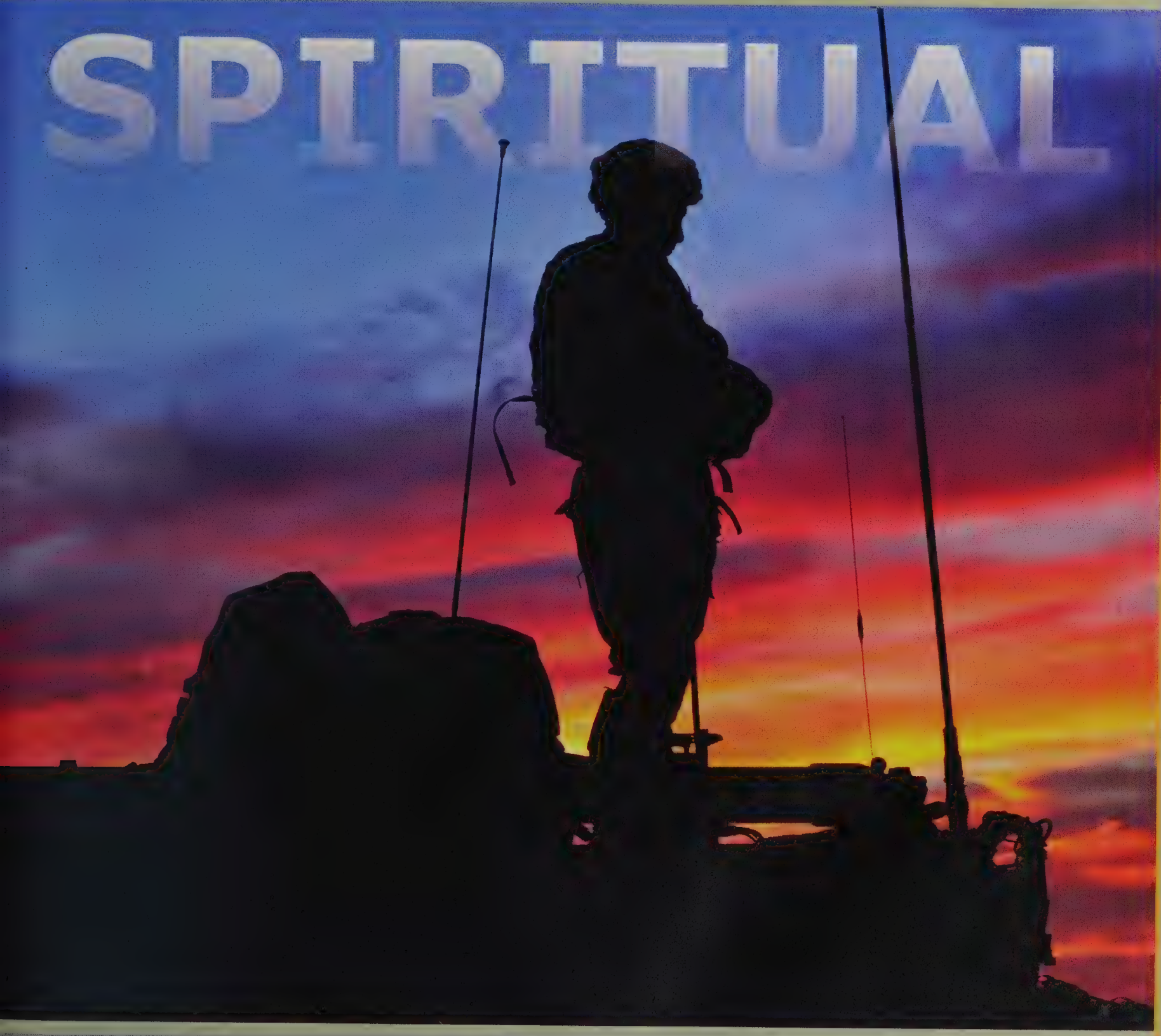
The Army's improved machine-gun tripod systems include the **M192 Lightweight Ground Mount for Machine Guns** and the **XM205 Lightweight Heavy Machine Gun Tripod**. The M192 provides a lighter weight, low-profile mounting platform for the M249 and M240 for controlled, sustained and accurate fire at extended ranges. The M192 is compact and collapsible and weighs 6 pounds less than the M122A1 tripod it replaces. PM CSW will begin fielding the XM205 in 2013 for the dismounted M2 and Mk 19 to enable a quicker, more accurate target engagement. At 34 pounds, the XM205 weighs 16 pounds less than the current M3 heavy tripod and offers an integrated traverse and elevation mechanism that can be operated with one hand.

COMPREHENSIVE SOLDIER FITNESS

STRONG MINDS ★ STRONG BODIES

Physical | Emotional | Social | Spiritual | Family

SPIRITUAL



Strengthening a set of **beliefs, principles** or **values** that sustain a person beyond family, institutional, and societal sources of **strength.**

www.army.mil/csf

ASSOCIATION OF THE U.S. ARMY

OFFICERS AND COUNCIL OF TRUSTEES

Chairman: Nicholas D. Chabraja; *Deputy Chairman and CEO:* Thomas W. Rabaut; Valerie L. Baldwin; HON Rudy deLeon; SMA Robert E. Hall, USA Ret.; John D. Harris II; David K. Heebner; Marillyn A. Hewson; MG Patricia P. Hickerson, USA Ret.; LTG Larry R. Jordan, USA Ret.; CSM William T. Mixon, USA Ret.; Dennis A. Muilenburg; Lawrence B. Prior III; GEN Dennis J. Reimer, USA Ret.; GEN Carl E. Vuono, USA Ret.

Vice Chairman for Noncommissioned Officer and Soldier Programs: SMA Jack L. Tilley, USA Ret.; *Vice Chairman for National Guard and Reserve Affairs:* LTG Roger C. Schultz, USA Ret.; *Vice Chairman for Retiree and Veteran Affairs:* LTG David H. Ohle, USA Ret.; *Vice Chairman for Civilian Affairs:* George T. Singley III; *President and COO:* GEN Gordon R. Sullivan, USA Ret.; *Vice President, Finance and Administration:* LTG Thomas G. Rhame, USA Ret.; *Vice President, Education:* LTG Theodore G. Stroup Jr., USA Ret.; *Vice President, Membership and Meetings:* LTG Roger G. Thompson Jr., USA Ret.; *Vice President:* LTG Guy C. Swan III, USA Ret.; *Corporate Secretary:* Ann E. Belyea; *President Emeritus:* GEN Jack N. Merritt, USA Ret.

Region Presidents: Hank Zolla, 1st; COL Sandy McLeod, USA Ret., 2nd; Mary Trier, 3rd; COL Bradley D. Freeman, USA Ret., 4th; Paul Wagner, 5th; LTC Sharlee W. Smith, NVARNG Ret., 6th; COL Rance Farrell, USA Ret., 7th; LTC Lawrence Bethel II, USA Ret., Pacific; COL David R. Ellis, USA Ret., European Dept.

STAFF

Directors: *Editor in Chief,* ARMY *Magazine:* Mary Blake French; *Director of ILW Programs:* Sandra J. Daugherty; *Director of Noncommissioned Officer and Soldier Programs:* CSM Jimmie W. Spencer, USA Ret.; *Controller:* Helen I. Hegyi; *Director of Government Affairs:* William B. Loper; *Director of Marketing:* Millie R. Hurlbut, CAE; *Director of Industry Affairs:* Michael M. Scanlan; *Director of National Security Studies:* COL George P. Coan Jr., USA Ret.; *Director of AUSA Book Program:* Dr. Roger Cirillo; *Director of AUSA Family Programs:* Patricia Barron; *Director of Regional Activities:* COL John E. Davies, USA Ret.; *Director of Information Technology:* Norman H. Campbell Jr.; *Director of Communications*: David Liddle.

Managers and Senior Assistants: Peter F. Murphy Jr.; Valerie A. Holman; SGT Ronnie L. Gordon, USAR Ret.; LexaLynn T. Hooper; Merna Lipson; Lisa L. Atkinson; Michael P. Coleman; CSM Donald E. Thomas, USA Ret.; Alex Brody; SGM Leroy Bussells, USA Ret.; Rand Meade; SSG Donna M. Kelley, USA Ret.; Nzinga Jones; Linda Engel; Julie C. Rudowski; Kaye Culyba; Diane FitzGerald; LTC M. Isabelle Slifer, USA Ret.; COL Stanley E. Crow, USA Ret.; Maria Katindig; Angelika Ruehr; Jill Boynton; Kevin Irwin; Meagan Bailey; Carlo O. Katindig; Justine Walsh; Karen E. Moriłak; Nicholas Krueger; Swarna Vallabhaneni; William Rice; LaTashia Smith; Alexis Delgado-Waldron; Ellen Turner.

Assistants: Elvira C. Roget, Geneva A. Hardy, Janet H. Montes, Grigoriy V. Pruzhanskiy, Ronald P. Covill, Rhonell Dawkins, Teshaka A. Stanley, Cheryl Watson, Christine Lathrop, Barbara Bruce, Barbara Hollis, Odetta Jenkins, Amy B. Frankenstein, Ali Muhammad, Charles Lawson, Doris Simonetti, Carroll Lewis, Christine Gutermuth, Aurora Sunga, Gaye Hudson, Jared Lieberher, Mary Wille, Je'la Dean, Alana Jewett, Connie Williams, Matthew C. Dungan-Abney, Meredith Minai, John Moyer, Adele McClure.

* * *

INSTITUTE OF LAND WARFARE

Executive Director: LTG Theodore G. Stroup Jr., USA Ret. **Distinguished Fellows:** GEN George W. Casey Jr., USA Ret.; GEN Peter J. Schoomaker, USA Ret. **Senior Fellows:** GEN John W. Foss, USA Ret.; GEN William F. Kernan, USA Ret.; GEN Frederick J. Kroesen, USA Ret.; GEN Crosbie E. Saint, USA Ret.; GEN Leon Salomon, USA Ret.; GEN Louis C. Wagner, USA Ret.; LTG James M. Dubik, USA Ret.; LTG Thomas J. Plewes, AUS Ret.; LTG Richard G. Trefry, USA Ret.; CSM Daniel K. Elder, USA Ret.; Toni B. Wainwright.

ADVISORY BOARD OF DIRECTORS

Army Civilians
Philip E. Sakowitz Jr., Chmn.
Melinda M. Darby
Thomas Edwards
Barbara J. Heffernan
John E. Hodges
Mark R. Lewis
William F. Moore
Gerald J. Purcell
Diane M. Schaule
Richard E. Turner
Margaret Barrett-Tyree
Emily H. Vandiver
Maureen O. Viall
Toni B. Wainwright
*George T. Singley III
**LTC Isabelle Slifer, USA Ret.

Awards
LTG Arthur J. Gregg, USA Ret., Chmn.
BG Leo A. Brooks Jr., USA Ret.
LTG Charles E. Dominy, USA Ret.
MG Jerry C. Harrison, USA Ret.
SGM Todd B. Hunter, USA Ret.
MG Robert L. Nabors, USA Ret.
BG Harold W. Nelson, USA Ret.
LTG Thomas J. Plewes, AUS Ret.
SMA Kenneth O. Preston, USA Ret.
*GEN Gordon R. Sullivan, USA Ret.
*GEN Carl E. Vuono, USA Ret.
**Lisa L. Atkinson

Chapter Operations
COL Michael M. Neer, USA Ret., Chmn.
COL David A. Appling, USA Ret.
MG Leo J. Baxter, USA Ret.
COL Jimmy D. Cox, USA Ret.
COL Michor M. Gentemann, USA Ret.
COL Clyde W. Glosson, USA Ret.
CW5 Robert L. Huffman
SFC Michael P. Jarrell
COL Alan D. Kruse, USA Ret.
COL Donald D. Loftis, USA Ret.
LTC Dennis E. Morgan, USA Ret.
COL Thom E. Tuckey, USA Ret.
Dick Winter
**COL John E. Davies, USA Ret.

Finance and Audit
COL Ian T. Patterson, USA Ret., Chmn.
Dave Barber
Edward D. Dauksz
Ronald W. Johnson
Wesley F. Walters
MG Richard S. Colt, USA Ret. (Alternate)
Virginia E. Kinakin (Alternate)
*GEN Gordon R. Sullivan, USA Ret.
**LTG Thomas G. Rhame, USA Ret.

Noncommissioned Officer and Soldier Programs
*SMA Jack L. Tilley, USA Ret., Chmn.
CSM Mark C. Avery, USA Ret.
SFC Mary J. Dawson, USA Ret.
CSM Andrew McFowler, USA Ret.
CSM Larry D. Pence, USA Ret., ARNG
CSM William R. Pewther, USA Ret.
CSM Roger Stradley, USA Ret.
SFC Ron Taylor, USA Ret.
*CSM William Mixon, USA Ret.
**CSM Donald E. Thomas, USA Ret.
***CSM Michael D. Schultz
***CSM Richard J. Burch

Reserve Components
*LTG Roger C. Schultz, USA Ret., Chmn.
LTC Terry L. Allbritton, USA Ret.
CSM Victor S. Angry
MG Craig Bambrough, USA Ret.
MG William E. Barron, USA Ret.
COL William J. Beiswenger
COL Jeanne Blaes, USA Ret.
COL Anthony N. Kanellis
CSM Michael R. Lawrence
MG Curtis A. Loop, USA Ret.
COL Robert T. Lynch, USA Ret.
BG Richard S. Miller
SSG Joshua R. Morrison
MG Timothy E. Orr
COL Danelle L. Scotka, USAR Ret.
LTC Gloria J. Sherman
CW5 James Thompson
CW3 Mark L. Walton
**COL Stanley E. Crow, AUS Ret.

Resolutions
COL Gregory King, USAR Ret. Chmn.
CW5 Paul Amacher, USAR Ret.
CSM Mark Avery, USA Ret.
MAJ James Burrows, USA Ret.
COL Charles Guta, USA Ret.
LTC Marc Jacobson, USAR Ret.
MG Dave Kaucheck, USAR Ret.
COL Robert Mentell, USA Ret.
Dr. James Meyl, DAC Ret.
LTC Verl Miller, ORARNG
LTC Dennis Morgan, USAR Ret.
COL Michael M. Neer, USA Ret.
SGM Geri Wacker, USA Ret.
**William B. Loper

Retiree and Veteran Affairs
*LTG David H. Ohle, USA Ret., Chmn.
COL Jerome J. Comello, USA Ret.
COL Timothy P. Considine, USA Ret.
COL James E. Cunningham, USA Ret.
BG William F. Engel, USA Ret.
COL Henry R. Farrell, USA Ret.
MG Peter C. Franklin, USA Ret.
COL Edward S. Graham, USA Ret.
CSM William O. Morgan, USA Ret.
LTC Jeffrey L. Pinasco, USA Ret.
BG Robert G. Sausser, USA Ret.
CSM Robert W. Van Pelt
LTC Ruff Warren, USA Ret.
CSM Tommy A. Williams, USA Ret.
**SGM Leroy Bussells, USA Ret.

Standing Bylaws
COL Duane H. Bartrem, AUS Ret., Chmn.
Faye E. Earley
Karen R. Lowe
**Ann E. Belyea

*Council Member
**Staff Coordinator
***Liaison

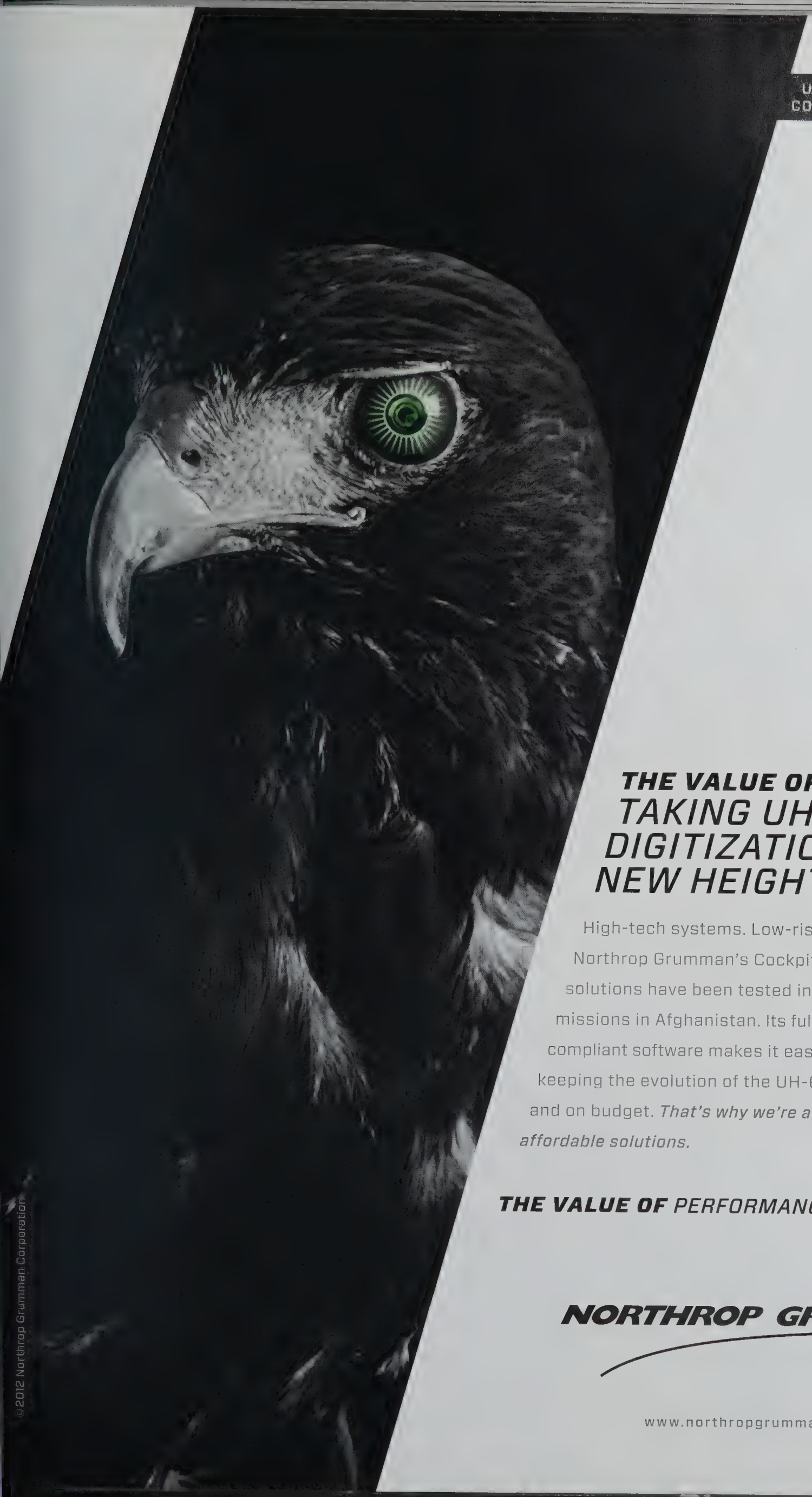
ADVERTISERS IN THIS ISSUE

ADS, Inc. 37, 39
Allison Transmission 339
AM General Corporation 65
American Ordnance, LLC 175
Armag Corporation 157
ArmorWorks 44
Ashford University 321
ATEC 148
ATK Defense 187
AUSA Membership 249
Avon Protection 341
BAE Systems 262
Bell Helicopter 8
Beretta USA Corporation 198
Blue Ox 325
Bobcat Company 70
Boeing BDS .....19, 173, Cover IV
CAMSS Shelters 88, 142
Ceradyne, Inc. 77
Concurrent Technologies 207
Cubic Corporation 14
Curtiss-Wright Controls 83
Dana Commercial Vehicles 192
Datron World Communications 106
Day & Zimmermann, Inc. 175
Deployed Resources, LLC 317
DHS Technologies, LLC 61
DynCorp International 100
Engility Corporation 63
FLIR Systems, Inc. 85
FNH USA, LLC 310
GEICO 203
General Dynamics C4 Systems 170
General Micro Systems 57
The Greater Killeen Chamber of Commerce....331
GSA 189
Gulfstream Aerospace Corporation 130
Harris RF 3
HDT Global 191
Honeywell 97
IBM Business Consulting Services 184
iRobot Corporation 327
Israel Aerospace Industries Ltd. 29
Israel Military Industries Ltd. 319
ITT Defense and Information Solutions .....
.....6 page insert between 224 and 225
John Deere 58
Kipper Tool 34
Kongsberg Protech Systems 49
L-3 Communications 22, 23
L-3 Display Systems 109
L-3 WESCAM 103
Leupold & Stevens 74
Lockheed Martin 53, 167
Meggitt Defense Systems 124
Meritor 121
Michelin 41
Navistar Defense LLC 115
Navy Federal Credit Union 66
Northrop Grumman Corp. .....183, Cover III
Norwich University 6
NovAtel, Inc. 323
Oshkosh Defense .....Cover II
OTTO 329
Panasonic 31
Parker Aerospace 160
Patriots Landing 289
Phantom Products Inc. 112
Polaris GEM Electric Vehicles 118
Polartec 24
Poongsan 94
Rada Electronic Industries Ltd. 315
Rafael 33
Raydon Corporation 80
Raytheon Company 42, 43
ReconRobotics, Inc. 179
Revision Military Ltd. 136
SCHOTT North America 13
Seiler Instrument & Manufacturing Co., Inc. ...163
SIG SAUER 133
Sikorsky 145
Smith & Wesson 152
SRC, Inc. 139
Streamlight, Inc. 21
SureFire, LLC 127
Textron Systems 4, 5
Thales USA, Inc. 55
UTC Aerospace Systems 50, 197
Vectronix Inc. 181
VT Miltope 47
VT Systems 337
W.L. Gore & Associates 91

Commemoration of the 50th Anniversary of the Vietnam War

In a proclamation released before Memorial Day, the President declared May 28, 2012–November 11, 2025 as the Commemoration of the 50th Anniversary of the Vietnam War. In the spirit of inclusiveness, this unprecedented 13-year tribute, a partnership of government, communities and private enterprises, honors the dignity and patriotism of more than three million men and women—among them more than 58,000 servicemembers who paid the ultimate sacrifice—who served their nation during one of our country's most trying eras.

October 2012



UH-60L BLACK HAWK
COCKPIT DIGITIZATION

THE VALUE OF *TAKING UH-60L DIGITIZATION TO NEW HEIGHTS.*

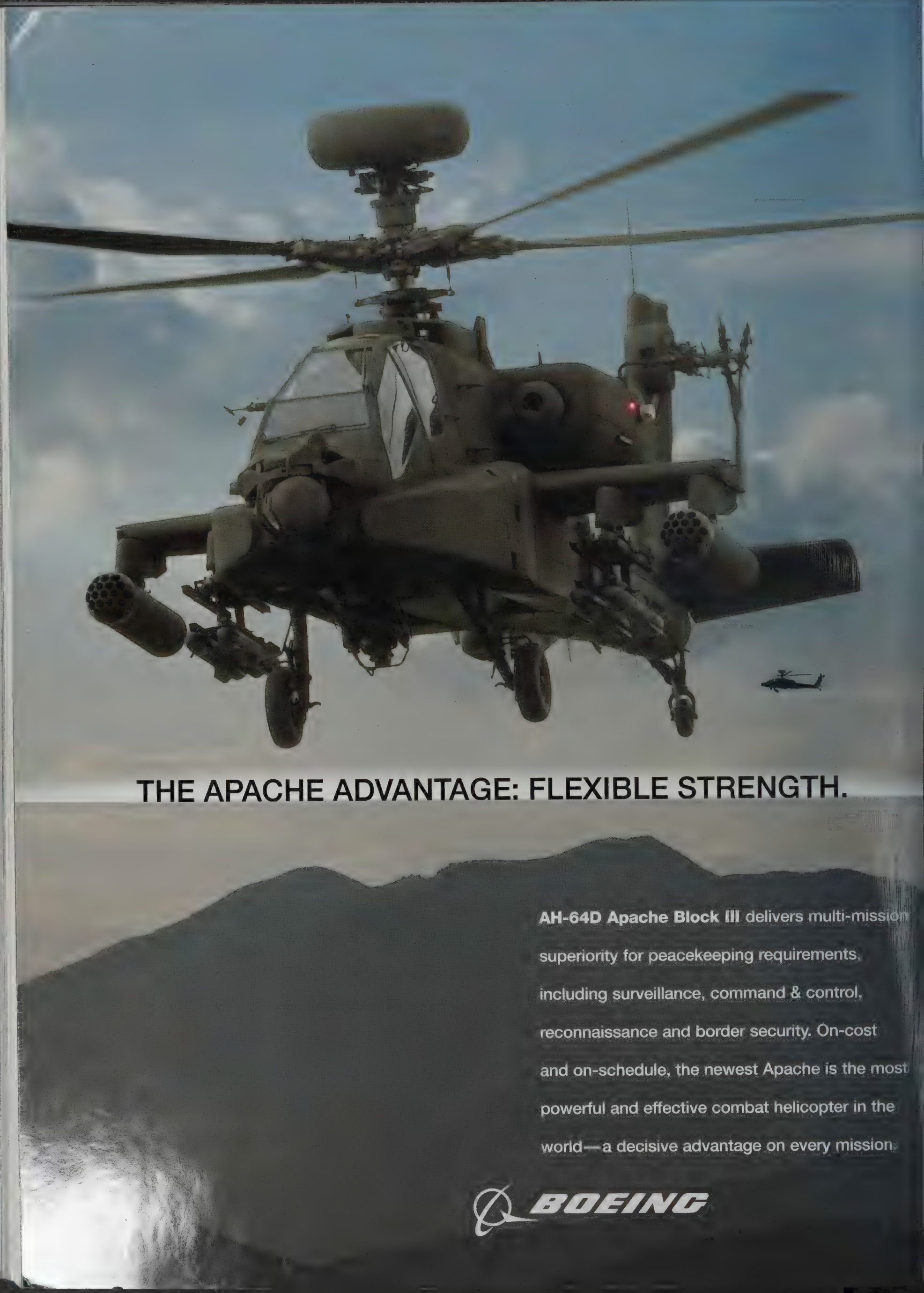
High-tech systems. Low-risk solutions. Northrop Grumman's Cockpit Digitization solutions have been tested in countless combat missions in Afghanistan. Its fully open, DO-178 compliant software makes it easily upgradeable, keeping the evolution of the UH-60L on schedule and on budget. *That's why we're a leader in adaptable, affordable solutions.*

THE VALUE OF *PERFORMANCE.*

NORTHROP GRUMMAN

www.northropgrumman.com/**blackhawk**

© 2012 Northrop Grumman Corporation


THE APACHE ADVANTAGE: FLEXIBLE STRENGTH.
AH-64D Apache Block III delivers multi-mission superiority for peacekeeping requirements, including surveillance, command & control, reconnaissance and border security. On-cost and on-schedule, the newest Apache is the most powerful and effective combat helicopter in the world—a decisive advantage on every mission.
BOEING

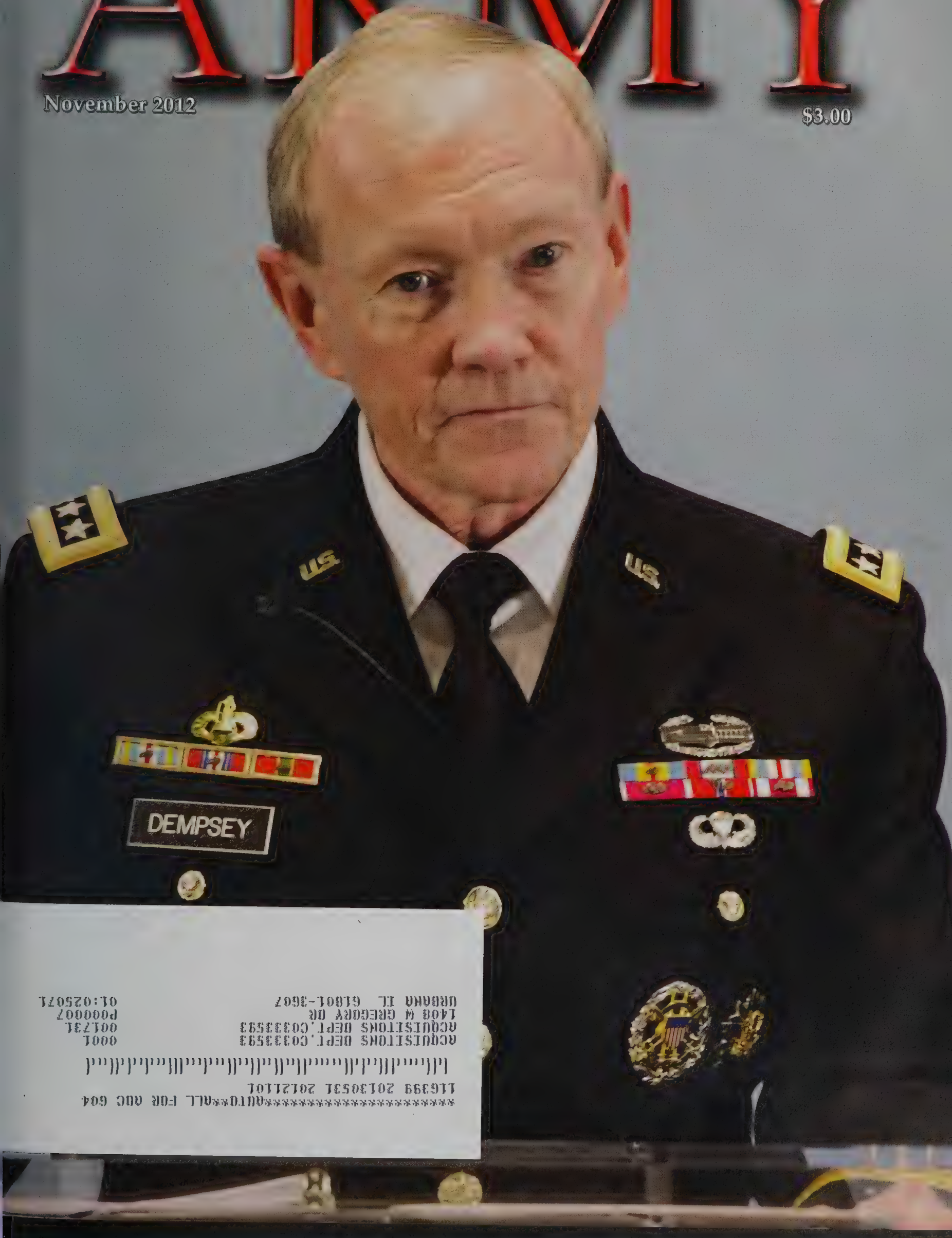
ducation Periodicals
55.05 UNC
62, no. 11 (2012)

Association of the United States Army

ARMY

November 2012

$3.00



ACQUISITIONS DEPT.C03333933 0001
ACQUISITIONS DEPT.C03333933 001731
1408 W GREGORY DR P000007
URBANA IL 61801-3607 01:025071

LIG399 20130531 20121101
**********AUTO**ALL FOR AUC 604

|||||||

EXELIS

THE POWER OF INGENUITY

Remote mission.
Proven broadband.
Cost-effective solution.

In the world of satellite communications, GNOMAD stands apart. Combat proven by the U.S. Army in Northern Iraq and Kuwait, GNOMAD equips forces with reliable broadband communications by extending Wi-Fi and 3G/4G cellular networks into harsh environments.

Modular by design, GNOMAD delivers affordable networking beyond line-of-sight while on the move. To learn more about GNOMAD's innovative capabilities, visit **www.exelisinc.com/gnomad-dom**

www.exelisinc.com

Exelis is a registered trademark and "The Power of Ingenuity" is a trademark both of Exelis Inc. ITT is a trademark of ITT Manufacturing Enterprises, LLC, and is used under license. Copyright © 2012 Exelis Inc. All rights reserved.

ARMY

MAGAZINE

NOVEMBER 2012
VOL. 62, NO.11

PUBLISHED BY THE ASSOCIATION OF THE U.S. ARMY

www.ausa.org

FRONT & CENTER

National Strategy: Another Look
By GEN Frederick J. Kroesen, USA Ret.
Page 15

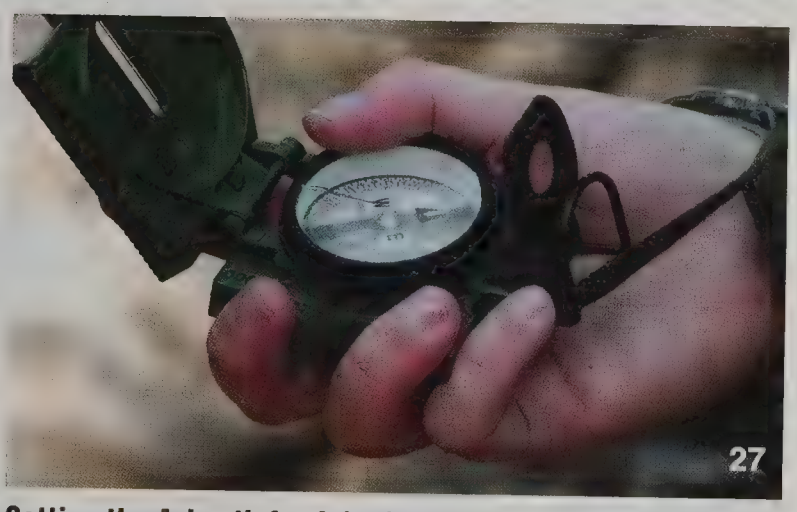
Army Acquisition: Let's Light a Few Candles
By BG James R. Moran, USA Ret.
Page 16

Who and What Is a Veteran?
By MG Guy S. Meloy, USA Ret.
Page 20

FEATURES

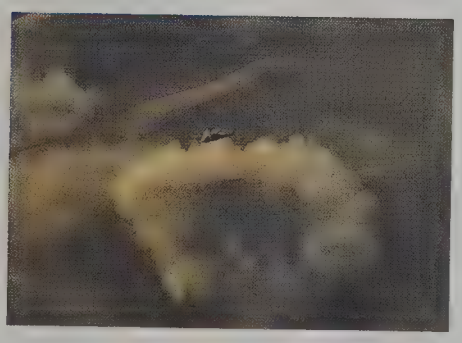
Historically Speaking: Defense Transformation Redux
By BG John S. Brown, USA Ret.
As interest in defense transformation begins to grow again, the Army stands to benefit from lessons drawn from similar experiences of the past. The author offers six.
Page 23

23



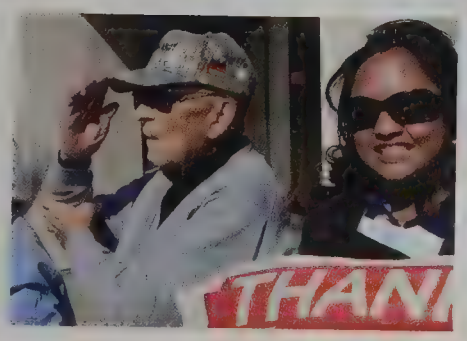
27

Setting the Azimuth for Joint Force 2020: Globally Integrated Operations and Mission Command
By Dennis Steele
In AUSA's inaugural GEN Bernard W. Rogers Strategic Issues Forum, GEN Martin E. Dempsey, Chairman of the Joint Chiefs of Staff, addresses Joint Force 2020 and the importance of adapting changes in strategy to correspond with changes in the world. **Page 27**



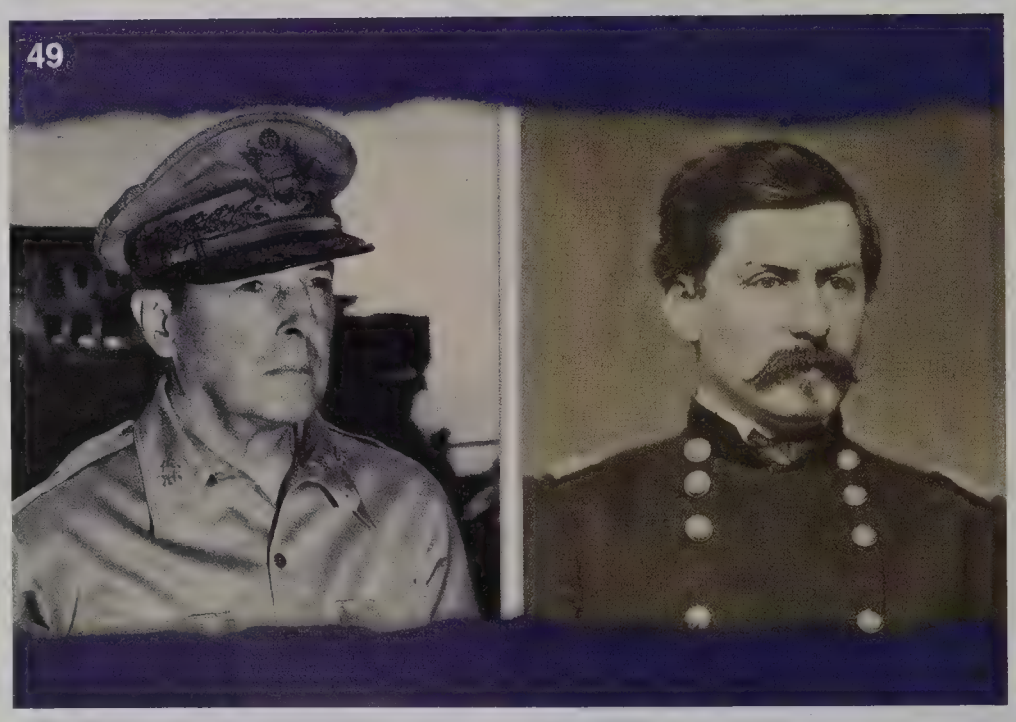
2012 ARMY Magazine Photo Contest
The best images in Army's 17th Annual Photo Contest.
Page 30

30



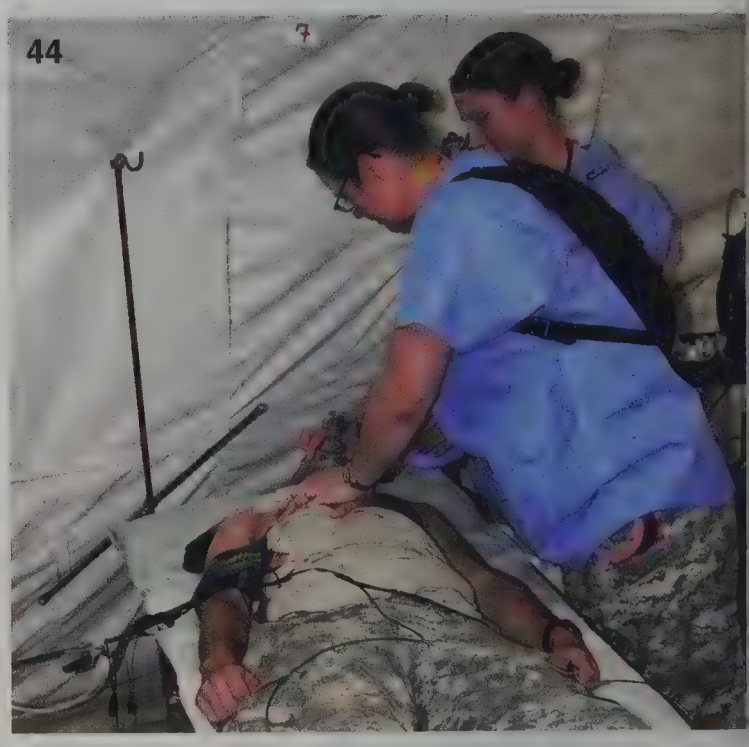
ARMY CONTENTS

Father Emil Kapaun
By LTC William C. Latham Jr., USA Ret.
U.S. Army Chaplain Emil Kapaun, fearless in his commitment to soldiers he inspired and ministered to on the front lines of the Korean War, was captured during the battle of Unsan and died in a Chinese prisoner-of-war camp, leaving a legacy of heroism. ***Page 38***



Company Command: Building Combat-Ready Teams
What Do You Want Most in a Leader?
Company commanders share and compare the attributes they value most in bosses and subordinates. ***Page 59***

Global Medic 2012 *By Scott R. Gourley*
An annual joint field training exercise, Global Medic allows Army Reserve soldiers to train in aeromedical evacuation and ground casualty treatment in a battlefield environment and with the most up-to-date medical equipment. ***Page 44***



Fall from Grace: The Parallel Careers of General of the Army Douglas MacArthur and MG George B. McClellan
By COL Cole C. Kingseed, USA Ret.
Despite their military talent and popular support, MG George B. McClellan and GEN Douglas MacArthur, standout graduates of the U.S. Military Academy who rose rapidly through the ranks, shared traits and personalities that contributed to their dismissals from duty. ***Page 49***

DEPARTMENTS

Letters 4
Advertisers in This Issue 5
Washington Report 6
News Call 9
Soldier Armed 64
Sustaining Member Profile 66
Reviews 67

BATTLEGUARD®

REMOTE WEAPON STATION

BEST PERFORMANCE.
MOST VERSATILE.
MOST CONFIGURABLE.

With its superior range and resolution, BattleGuard is the most modular and high-performance remote weapon station for current and future tracked and wheeled military vehicles. It is the only system that can accurately identify targets out to the maximum effective range of weapon systems, more than twice that of competitive technologies. BattleGuard integrates 16 lethality systems (and counting) — all readily configurable by the warfighter — to deliver 360 degrees of proven protection.

To learn more about how BattleGuard is driving Remote Weapon Station capability, please visit:
Raytheon.com | Keyword: BG360

Follow us on:

Raytheon

Customer Success Is Our Mission

© 2012 Raytheon Company. All rights reserved.
"Customer Success Is Our Mission" is a registered trademark of Raytheon Company.

GEN Gordon R. Sullivan, USA Ret.
President, AUSA

LTG Theodore G. Stroup Jr., USA Ret.
Vice President, Education, AUSA

Mary Blake French — *Editor in Chief*
Larry Moffi — *Managing Editor*
Joseph L. Broderick — *Art Director*
Dennis Steele — *Senior Staff Writer*
Toni Eugene — *Associate Editor*
Christopher Wright — *Production Artist*
Jeremy Dow — *Assistant Editor*
Katharine Scott — *Assistant Editor*
Thomas B. Spincic — *Editorial Assistant*

Contributing Editors

GEN Frederick J. Kroesen, USA Ret.; LTG James M. Dubik, USA Ret.; and Scott R. Gourley

LTG Thomas G. Rhame, USA Ret.
Vice President, Finance and Administration, AUSA

James E. Burke — *Advertising Manager*
Meagan B. Bailey
Advertising Production Manager

Norman Campbell — *Fulfillment Director*
Valerie Holman — *Fulfillment Manager*

ARMY is a professional journal devoted to the advancement of the military arts and sciences and representing the interests of the U.S. Army. Copyright©2012, by the Association of the United States Army. ☐ **ARTICLES** appearing in ARMY do not necessarily reflect the opinion of the officers or members of the Council of Trustees of AUSA, or its editors. Articles are expressions of personal opinion and should not be interpreted as reflecting the official opinion of the Department of Defense nor of any branch, command, installation or agency of the Department of Defense. The magazine assumes no responsibility for any unsolicited material. ☐ **ADVERTISING**. Neither ARMY, nor its publisher, the Association of the United States Army, makes any representations, warranties or endorsements as to the truth and accuracy of the advertisements appearing herein, and no such representations, warranties or endorsements should be implied or inferred from the appearance of the advertisements in the publication. The advertisers are solely responsible for the contents of such advertisements. ☐ **RATES**. Individual memberships and subscriptions payable in advance (one year/three year): $21/$63 for E1-E4, cadets/OCS and GS1-GS4; $26/$71 for E5-E7, GS5-GS6; $31/$85 for E8-E9, O1-O3, W1-W3, GS7-GS11 and veterans; $34/$93 for O4-O6, W4-W5, GS12-GS15 and civilians; $39/$107 for O7-O10, SES and ES; life membership, graduated rates to $525 based on age; $17 a year of all dues is allocated for a subscription to ARMY Magazine; single copies, $3.00. For other rates, write Fulfillment Manager, Box 101560, Arlington, VA 22210-0860.

ADVERTISING. Information and rates available from the Advertising Production Manager or our advertising representatives, who are:

The Audit Bureau

James E. Burke and **Irene Lamar**, 230 Park Ave., Suite 1546, New York, NY 10169. (212) 697-2844. FAX (212) 682-1421. Email: advdpt@aol.com.

ARMY (ISSN 0004-2455), published monthly. Vol. 62, No. 11. Subscription $34 a year. Publication offices: Association of the United States Army, 2425 Wilson Blvd., Arlington, VA 22201-3326, (703) 841-4300, FAX: (703) 841-3505, email: armymag@ausa.org. Visit AUSA's web page on the Internet at www.ausa.org. Periodicals postage paid at Arlington, Va., and additional mailing office.

POSTMASTER: Send address changes to ARMY Magazine, Box 101560, Arlington, VA 22210-0860.

Letters

'Crush of Requirements'

■ LTC Thomas P. McKenna's letter in the September issue of ARMY detailing then-CPT Edward C. Meyer's frustration with the "crush of requirements" was interesting but did not provide the full story. As Chief of Staff, GEN Meyer learned the lessons from constant changes, conflicting priorities and crushing administrivia, and then dramatically changed the Army.

After Operation Desert Storm, one of my early-1970s cohorts observed that we had served in two armies—the hollow U.S. Army *before* GEN Meyer and the highly lethal and effective Army that accomplished Operation Desert Storm *after* GEN Meyer. Sadly, based on the commander's comments in "Crush of Requirements," the lessons have been lost. In the "before" Army, training schedules were meaningless, priorities and operations changed on whim, unit status reports were works of fiction, and standards varied by location and command. GEN Meyer brought Army-wide standards and consistent priorities, enforced pushing authority and responsibility to the lowest level, and lifted administrative burdens from operational elements. The changes were immediate and dramatic. It's amazing what can be accomplished when there is consistency of purpose throughout the chain of command.

William Edwards Deming initially wrote that in any organization 85 percent of the problems can be attributed to leadership; later in his life he revised the number to 95 percent. If the operational elements suffer under a crush of administrivia and a lack of clarity and consistency, it's because that's what leadership wants. GEN Meyer established beyond a doubt that it can be different.

COL Maurie Petterson, USA Ret.
Columbus, Mont.

'Riot Control 101'

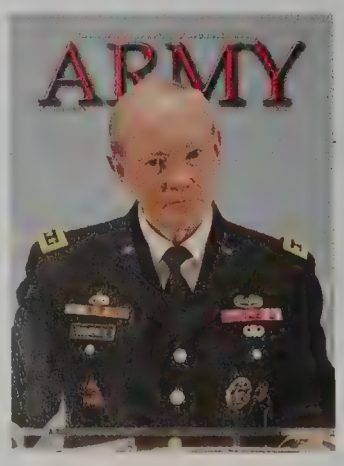
■ I tore MG Guy Meloy's "Riot Control 101" article from my September issue of ARMY Magazine to save in my Read and Re-read file. His descriptions remind me of a handful of opportunities to work for and learn from great leaders. Thank you for a timeless professional development primer. His message defines unleashing powerful and creative capacity for mission success when leaders offer "what" and not "how."

I treasure his crisp words and will refer to them often.

Ellen Houlihan,
USMA Class of 1982
Allen, Texas

This Month's Cover

Chairman of the Joint Chiefs of Staff GEN Martin E. Dempsey speaks at the inaugural GEN Bernard W. Rogers Strategic Issues Forum. The Rogers Strategic Issue Forum is sponsored by AUSA as a platform for expressing ideas that will shape the U.S. military for the future. GEN Dempsey is leading the effort to shape Joint Force 2020, which is based on achieving "globally integrated operations," a concept that quickly brings together a geographically separated force mix tailored for a specific need and fully integrates the service capabilities under a joint command and control structure. The concept is explained in the recently released document *Capstone Concept for Joint Operations: Joint Force 2020*, produced under GEN Dempsey's direction. The article begins on Page 27. *(Cover photograph by Dennis Steele.)*



MAJ Shuffer and President Truman

■ I was reading the August issue of ARMY when I came across a picture of my father, then-MAJ George M. Shuffer Jr., taken with President Truman at the Command and General Staff College in December 1961. My father is in the second row, third from the left. At the time my father was a veteran of World War II and the Korean War, when he was awarded two Silver Stars. He would go on to fight in the Vietnam War, when he received his third Silver Star as commander of 2nd Battalion, 2nd Infantry, 1st Infantry Division. He retired from the Army in 1975 as a brigadier general.

COL DAVID K. SHUFFER,
TXARNG RET.
Colleyville, Texas

In 1961, the author's father (2nd row, third from left) and 18 other officers joined former President Truman to discuss the Korean War.

National Archives

ADVERTISERS IN THIS ISSUE

AUSA Membership	8
General Dynamics C4 Systems	Cover III
Harris RF	Cover IV
iRobot	5
ITT Exelis	Cover II
Northrop Grumman Corp.	7
Raytheon Company	3

ADVERTISING. Information and rates available from the Advertising Production Manager or our advertising representatives:

The Audit Bureau

James E. Burke and **Irene Lamar**, 230 Park Ave., Suite 1546, New York, NY 10169. (212) 697-2844.
FAX (212)682-1421. Email: advdpt@aol.com.

Washington Report

Production of Heralded MRAPs Ends

In a ceremony at the Pentagon in October, Vice President Joe Biden and Assistant Secretary of Defense Ashton B. Carter marked the end of production of the mine-resistant ambush-protected vehicle (MRAP) that is credited with saving thousands of lives in Iraq and Afghanistan. The ceremony formalized the MRAP's transition to a program of record, leaving nearly 13,000 of the vehicles currently in use in Afghanistan.

In 2007, then-Secretary of Defense Robert M. Gates designated the MRAP program his top acquisition priority, and Congress ultimately appropriated $47.4 billion for the vehicle through fiscal year 2012.

The vehicle, with a blast-resistant V-shaped hull, offered a better defense than the Humvee against the roadside bombs known as improvised explosive devices favored by insurgents. Nearly 28,000 MRAPs in seven variants have been produced over the past five years. More than 24,000 of them were fielded to Iraq and Afghanistan.

The MRAP team, Mr. Gates said in a message read at the Pentagon ceremony, "implemented the largest defense procurement program to go from decision to full industrial production in less than a year since World War II."

Congressional Update. In late September, the Senate passed a continuing resolution (CR) that will fund federal programs through March 27, 2013, thus avoiding a government shutdown on October 1, when fiscal year (FY) 2013 began. The CR, previously passed by the House and signed into law by President Obama, provides $608 billion for the Pentagon, including $88.5 billion for overseas contingency operations. It increases funding levels for most programs and agencies by about 0.6 percent and postpones a decision on the $109 billion in automatic across-the-board budget cuts slated to begin on January 2 (known as sequestration) until Congress returns on November 13.

The continuing resolution, however, left out funding for the approximately 200 U.S. troops in Iraq training that country's forces. The Iraqi Security Forces Fund authority for the training of those forces expired September 30, and in early October DoD had to effect a stopgap measure to obtain the funds.

The U.S. Embassy in Baghdad maintains an Office of Security Cooperation under which U.S. troops train Iraqi security forces and work with them on counterterrorism. At the request of U.S. Central Command, the Joint Chiefs of Staff shifted $1.7 million from other DoD accounts into the Combatant Commander Initiative Fund, which will fund the military training and education efforts as well as counterterrorism operations for another three months.

Congress left numerous bills pending for the upcoming lame-duck session, among them the Stolen Valor Act of 2012 involving individuals who lie about receiving military medals and then attempt to profit from their sale. The Supreme Court declared the original act unconstitutional in June, arguing that it unfairly limited free speech; a new, more narrowly written version was agreed to in the House in September and was received in the Senate several days later.

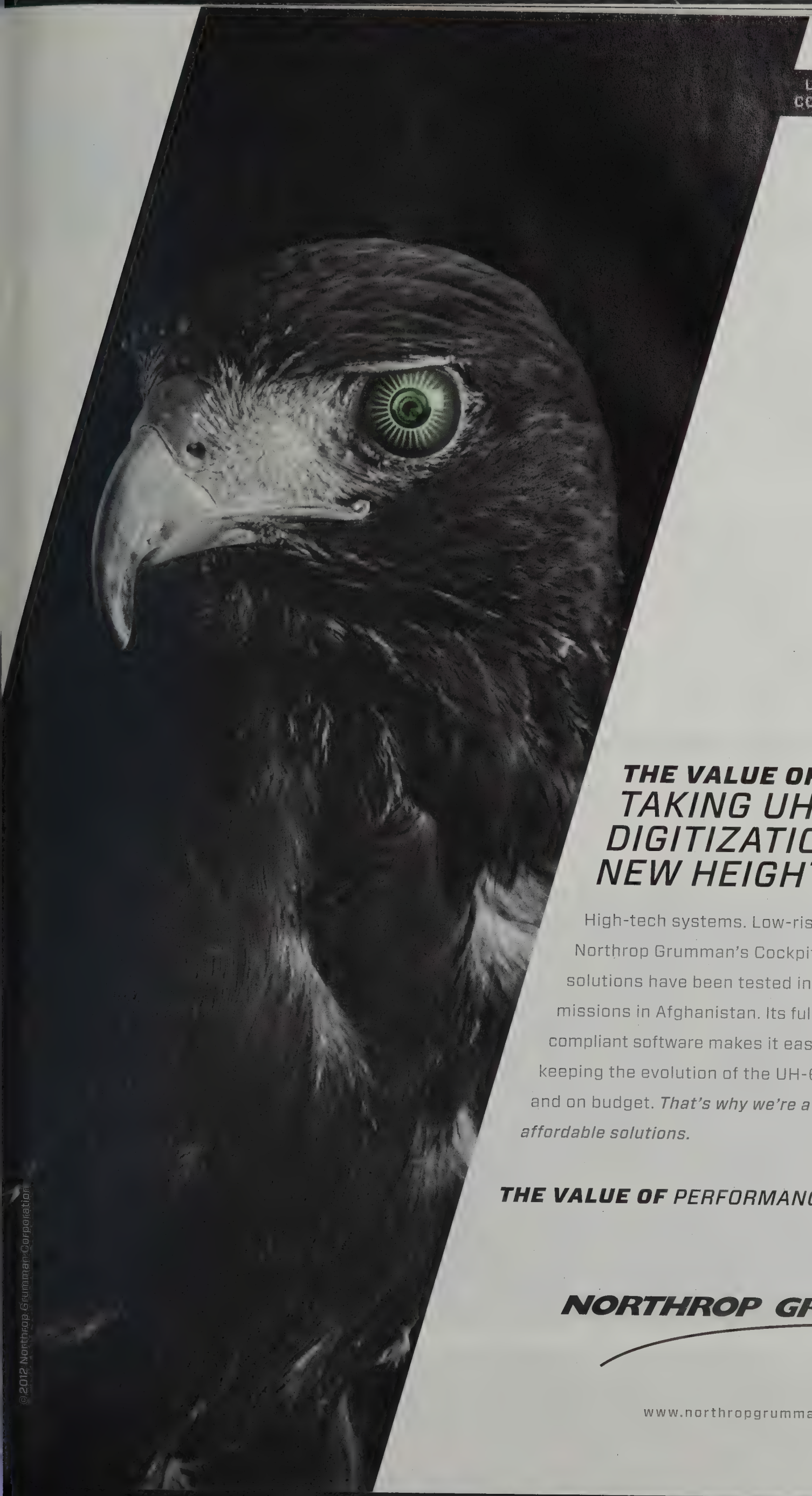
In addition, the Veterans Job Corps Act of 2012, incorporating a $1 billion program outlined by President Obama in his State of the Union address, was defeated on a procedural vote in the Senate. Based loosely on the Civilian Conservation Corps—established by President Franklin D. Roosevelt to find jobs for hundreds of thousands of people during the Great Depression—the measure would have employed veterans in conservation and restoration work in national parks, Veterans Affairs cemeteries, and other federal, state and local lands.

GEN Odierno Backs Teacher Education. In early October Army Chief of Staff GEN Raymond T. Odierno joined Dr. Jill Biden, wife of the Vice President, in a Washington, D.C. suburb to announce Operation Educate the Educators, an initiative to educate teachers on the unique needs and challenges children of servicemembers face as students.

Cosponsored by the American Association of Colleges for Teacher Education and the Military Child Education Coalition, the initiative is part of the White House "Joining Forces" campaign begun in April 2010. More than 100 colleges and universities have signed on to help prepare future educators to ensure they have the knowledge and skills to meet the needs of military children, approximately 80 percent of whom change school systems six to nine times on average.

GEN Odierno said that he and his family moved 24 times during his 36-year military career, requiring his son and daughter to change schools during each year of high school. His children are successful, he said, largely because of their military upbringing and the resilience it inspires.

Shyu Confirmed as ASA (ALT). Heidi Shyu was confirmed as the Assistant Secretary of the Army for Acquisition, Logistics and Technology (ASA ALT) by the Senate in late September. Shyu had served as the Acting ASA (ALT) since May 2011. She has principal responsibility for all Department of the Army matters relating to logistics and is also responsible for appointing, managing and evaluating program executive officers, and managing the Army Acquisition Corps and the Army Acquisition Workforce.



UH-60L BLACK HAWK
COCKPIT DIGITIZATION

THE VALUE OF
TAKING UH-60L DIGITIZATION TO NEW HEIGHTS.

High-tech systems. Low-risk solutions. Northrop Grumman's Cockpit Digitization solutions have been tested in countless combat missions in Afghanistan. Its fully open, DO-178 compliant software makes it easily upgradeable, keeping the evolution of the UH-60L on schedule and on budget. *That's why we're a leader in adaptable, affordable solutions.*

THE VALUE OF *PERFORMANCE.*

NORTHROP GRUMMAN

www.northropgrumman.com/**blackhawk**

© 2012 Northrop Grumman Corporation

AUSA
Membership Benefits

Bank of America, N.A.:
AUSA Bank Card
Start receiving great rewards and show your support for AUSA. Call 866-438-6262.

Institute of Land Warfare:
ILW offers writing programs; conducts conferences and symposia; publishes essays, Defense Reports, newsletters; and provides research on defense issues. Call 800-336-4570, ext. 4630 for details.

AUSA Mastercare Group Insurance Plans:
- Active Duty & Retiree TRICARE Supplement
- Accidental Death and Dismemberment Plan
- 10-Year Level Term Life Insurance Plan
- Group Term Life Insurance Plan
- Short-Term Recovery Plan
- Long Term Care Plan

Call 800-882-5707 for more information.

Dental and Vision Discount Plans:
Discounts offered to AUSA members on dental services and vision exams. Call 800-290-0523.

This plan is not available in the states of MT and VT.

Emergency Assistance Plus:
If you or a family member gets injured or sick while on travel, this plan will provide medical assistance, bring a medical specialist or loved one to your side and much more. Call 888-633-6450 for more information.

Government Vacation Rewards:
AUSA now offers its members discounts on cruises, resorts and tour providers. Call 866-871-9181.

GEICO Insurance – Auto, Home, Condo/Renters, and Boat:
In states where available, a special member discount may apply. Call 800-861-8380.

Apple Member Purchase Program:
Apple Computers offers AUSA members a substantial savings on its computers. Call 800-MY-APPLE and mention you are a member of AUSA.

Book Program:
Members receive discounts on selected military books.

Army Times/Federal Times:
Subscription discounts on Army Times/Federal Times. Call 800-368-5718.

Dell Member Purchase Program:
AUSA members can now receive discounts on Dell PCs. Call 800-695-8133 for more information.

AUSA Career Center:
AUSA members can now post their resumes and employers can advertise any new openings they have. Visit our Web site and go to the Resources drop-down, then Career Center.

University of Maryland University College (UMUC):
University of Maryland University College (UMUC) is pleased to offer undergraduate and graduate study programs to AUSA members worldwide. For some program participants, a discounted tuition rate will apply.

Armed Forces Services Corporation:
AFSC guides you through the details on military entitlements for your retirement and survivor planning/assistance for your spouse. Call or e-mail: 888-237-2872, info@AFSC-USA.com.

Choice Hotels International®:
AUSA members can receive discounts on hotel rooms at the following hotels.

- Comfort Inn®
- Comfort Suites®
- Quality®
- Sleep Inn®
- Clarion®
- Cambria Suites®
- MainStay Suites®
- Suburban Extended Stay Hotel®
- Econo Lodge®
- Rodeway Inn®

Call 800-258-2847 and use the code 00800700.

Car Rental Program:
Use the reservation codes on the back of your membership card and save at:

• AVIS	800-331-1441	• Hertz	800-654-6511
• Budget	800-455-2848	• National	800-Car-Rent
• Alamo	800-354-2322 *(rental for under age 25 available)*		

Publications:
- *ARMY* Magazine every month, including the October *ARMY Green Book*.
- *AUSA NEWS* every month.

* **Member discounts and services are subject to change.**

For more detailed information, visit Members Only Benefits and Services at www.ausa.org
or call Member Support at 855-246-6269 / 703-841-4300

News Call

New Assistance Brigades Deploy to Afghanistan

The first of a new type of unit, the Security Force Assistance Brigade (SFAB), deploys to Operation Enduring Freedom this month as increasing numbers of insider attacks on U.S. troops have prompted NATO's International Security Assistance Force (ISAF) to adjust its partnering with Afghan soldiers and policemen, a practice critical to increasing their numbers and capabilities in advance of the 2014 deadline for withdrawal of U.S. combat troops from the country.

The first SFAB to deploy is composed of about 1,900 soldiers from the 1st Brigade Combat Team (BCT), "Bastogne," 101st Airborne Division (Air Assault), out of Fort Campbell, Ky. The second, some 2,870 soldiers from the 2nd BCT, 10th Mountain Division (Light Infantry), Fort Drum, N.Y., will deploy this winter.

SFABs will focus on improving the proficiency of Afghan troops and will not lead in operations. They will be composed of groups of advisory teams but will also contain artillery support, intelligence, communications and other technical assets. The units will be smaller than a brigade combat team—1,500 to 2,000 soldiers—and will be tailored to meet specific needs in the area to which they are deploying. The commander of each SFAB will be in charge of all U.S. forces in his area of responsibility.

COL Dennis Sullivan, commander of 2nd BCT, says his unit is equipped to prevent insider attacks. That capability has grown in importance with a spike in attacks on ISAF troops; more than 50 NATO troops have been killed this year. U.S. forces are still partnering with Afghan forces but scaled back those operations in mid-September.

ISAF issued a statement stressing its continued commitment to "partnering with, training, advising and assisting" Afghan national security forces but noted it has taken "prudent but temporary" measures to reduce its vulnerability. What used to be routine operations, such as partnered patrols and manning remote outposts below battalion level, now must be approved by the commanding general of the regional command.

The 33,000 U.S. surge forces have redeployed, leaving about 68,000 American troops in Afghanistan, so the need for an Afghan force large enough and capable enough to assume the security mission by the end of 2014 grows more urgent.

In late September, Chairman of the Joint Chiefs of Staff GEN Martin E. Dempsey told reporters at a Pentagon news briefing that commanders in Afghanistan have made adjustments and partnered operations have resumed. NATO forces are adapting to the threat, he said, noting, "That's what professional militaries do. ... The Taliban is clearly trying to split us apart, but it won't work. They're working to weaken the coalition and that won't work either."

Deployments. The Department of Defense has identified five major units to deploy as part of the upcoming rotation of forces operating in Afghanistan. The scheduled rotation involves about 12,760 personnel, four brigade combat teams (BCTs)—two Infantry and two armored—and one combat aviation brigade, to rotate in winter 2012. The deploying units are:

- 1st BCT, 101st Airborne Division (Air Assault), Fort Campbell, Ky.
- 2nd BCT, 10th Mountain Division, Fort Drum, N.Y.
- 1st BCT, 1st Armored Division, Fort Bliss, Texas.
- 4th BCT, 1st Cavalry Division, Fort Hood.
- 1st Armored Division Combat Aviation Brigade, Fort Bliss.

National Guard News. GEN Frank J. Grass was sworn in as the 27th chief of the National Guard Bureau and received his fourth star during a change of responsibility ceremony at the Pentagon in September. GEN Grass suc-

DoD

From left, outgoing Chief of the National Guard Bureau Air Force Gen. Craig R. McKinley, Chairman of the Joint Chiefs of Staff GEN Martin E. Dempsey and GEN Frank J. Grass at his September swearing-in ceremony at the Pentagon.

440th Civil Affairs. *A mounted color guard accompanies 164 soldiers from the 440th Civil Affairs Battalion at Fort Carson, Colo., in September. The ceremony officially commissioned the unit into the U.S. Army Civil Affairs and Psychological Operations Command (Airborne). The battalion will conduct operations throughout U.S. Army Pacific Command.*

ceeds Air Force Gen. Craig R. McKinley, and will serve as a member of the Joint Chiefs of Staff under Chairman GEN Martin E. Dempsey.

Also in September, CSM Brunk W. Conley became the 10th command sergeant major of the Army National Guard, succeeding CSM Richard Burch, in a ceremony at the Army National Guard Readiness Center in Arlington, Va. CSM Conley most recently served as the command sergeant major of the Oregon National Guard.

NIE 13.1 Under Way. Network Integration Evaluation (NIE) 13.1, the fourth iteration in a series of semiannual field exercises that evaluate the Army's tactical network in realistic situations and scenarios, began at White Sands Missile Range, N.M., and Fort Bliss, Texas, in October and continues this month.

The exercise includes 3,800 soldiers of the 2nd Heavy Brigade Combat Team (HBCT), 1st Armored Division, and is managed by the Army Test and Evaluation Command, the Brigade Modernization Command and the System of Systems Integration Directorate. Like previous NIEs, 13.1 will further integrate and refine the Army's tactical network and streamline the way network technologies are delivered to soldiers through integrated "capability sets" of communications gear.

NIE 13.1 is building on the Capability Set (CS) 13 network, which was validated in the previous NIE 12.2, and includes initial evaluations of the CS 14 network baseline. The exercise is also:

- Evaluating integration/assessment of CS 14 onto heavy vehicle platforms.
- Evaluating mid tier radio waveforms.
- Continuing network operations convergence.
- Assessing operations-intelligence application convergence.
- Establishing the intelligence, surveillance and reconnaissance baseline.
- Evaluating command post capabilities.
- Providing and integrating Mission Command capabilities.

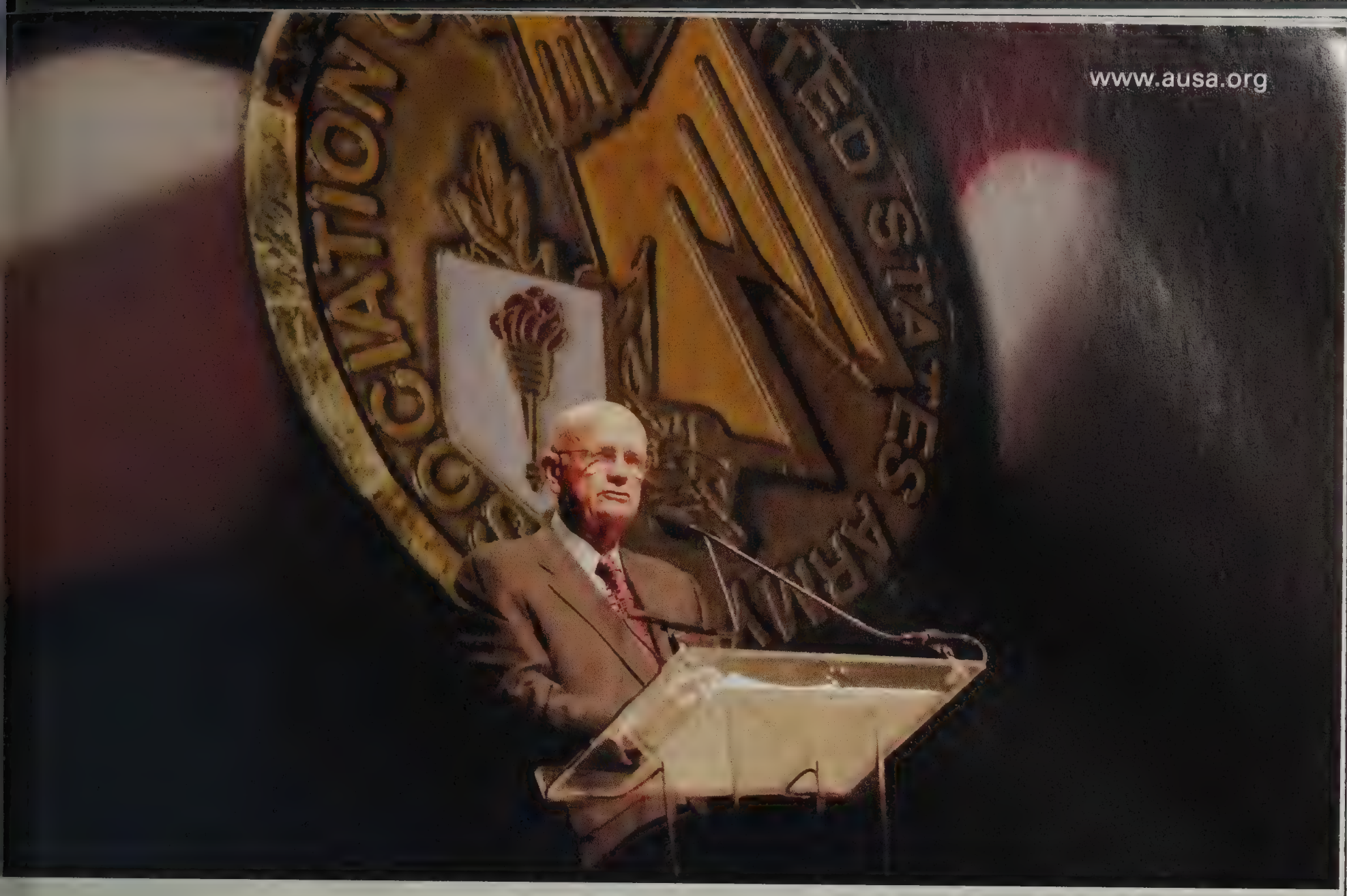
The Army is also applying lessons learned from NIE 12.2 to streamline testing and integration, increase industry participation, and cut individual system costs, re-engineering expenses and infrastructure costs.

Networked MRAPs Ready. The first of the mine resistant ambush protected

Army Casualties in Afghanistan

The following U.S. Army soldiers were reported killed supporting Operation Enduring Freedom from August 1 to September 30, 2012. All names have been released through the Department of Defense; families have been notified.

SPC Mabry J. Anders, 21
PFC Genaro Bedoy, 20
1SG Russell R. Bell, 37
SGT Christopher J. Birdwell, 25
SSG Jeremie S. Border, 28
PFC Shane W. Cantu, 20
SFC Coater B. Debose, 55
PFC Michael R. Demarsico II, 20
SGT Richard A. Essex, 23
SGT Luis A. Oliver Galbreath, 41
SGT Jonathan A. Gollnitz, 28
CSM Kevin J. Griffin, 45
SSG Eric S. Holman, 39
PFC Patricia L. Horne, 20
CW3 Brian D. Hornsby, 37
SPC James A. Justice, 21
PFC Andrew J. Keller, 22
MAJ Thomas E. Kennedy, 35
CW2 Suresh N.A. Krause, 29
1LT Todd W. Lambka, 25
PFC Jesus J. Lopez, 22
SPC Ethan J. Martin, 22
SPC Kyle B. McClain, 25
CW2 Jose L. Montenegro Jr., 31
SPC Joshua N. Nelson, 22
SGT Sapuro B. Nena, 25
SGT Kyle B. Osborn, 26
CW2 Thalia S. Ramirez, 28
SPC Kyle R. Rookey, 23
SSG Jonathan P. Schmidt, 28
SSG Matthew S. Sitton, 26
SSG Orion N. Sparks, 29
SFC Riley G. Stephens, 39
SGT Jason M. Swindle, 24
SGT Louis R. Torres, 23
PFC Jon R. Townsend, 19
MSG Gregory R. Trent, 38
SGT David V. Williams, 24
SSG Jessica M. Wing, 42



Over 650 of the world's leading defense companies are members of the AUSA Sustaining Membership Program. Is yours?

The Association of the United States Army's (AUSA) Sustaining Membership Program is your vital link to Army decision-makers at the highest levels. As the Army's professional organization, AUSA has played a role in strengthening national security for over 60 years by facilitating partnerships between military decision-makers and industry leaders.

When you join AUSA's Sustaining Membership Program, your company's executives will have the opportunity to share ideas with top Army officials at AUSA events. These events are conducted and attended by high level Army decision-makers, DoD officials and industry leaders – the individuals who are setting the agenda for the Army's future!

Join us today and discover what the AUSA Sustaining Membership Program can do for your business.

AUSA Sustaining Membership Program:

Supporting the Army–Industry Partnership

Association of the United States Army
2425 Wilson Boulevard • Arlington, VA 22201 • (703) 841-4300 ext. 2665 • www.ausa.org

(MRAP) vehicles equipped with an integrated network communications package began fielding to 10th Mountain Division, Fort Drum, N.Y., in October. The MRAPs are equipped with components of the Army's first capability set (CS) 13—a package of network components, associated equipment and software that provides an integrated network from the tactical operations center down to the dismounted soldier. The 3rd and 4th Brigade Combat Teams of 10th Mountain Division will receive the vehicles over the next several months and will deploy with the units.

The MRAPS are configured with CS 13's Warfighter Information Network-Tactical Increment 2, which enables Mission Command on the move and allows soldiers to communicate continuously inside the vehicles. CS 13 also extends satellite communications to the company level and includes advanced radios and handheld devices that provide an unprecedented level of real-time information. The capabilities of the communications package were tested and its capabilities verified at Network Integration Evaluation (NIE) 12.2.

Eventually, the networked MRAPs will field to eight infantry brigade combat teams and those deploying or preparing to deploy to Afghanistan. A forward-stationed brigade in Korea will receive the first vehicles.

COMMAND SERGEANTS MAJOR CHANGES*

CSM H. Rhodes from USARAF, Vicenza, Italy, to U.S. Army North, Fort Sam Houston-JB San Antonio, Texas.

CSM D. Zavodsky from 7th Army JMTC, Grafenwoehr, Germany, to U.S. Army South, Fort Sam Houston-JB San Antonio.

■ ***JMTC**—Joint Multinational Training Command; **USARAF**—U.S. Army Africa.*

**Command sergeants major positions assigned to a general officer command.*

GENERAL OFFICER CHANGES*

LTG M.S. Bowman from Dir., J-6, Jt. Staff, Washington, D.C., to Dir. for C4/Cyber, CIO, J-6, Jt. Staff, Washington, D.C.

LTG F.B. Hodges from Chief of Land Cmd., Izmir, SUT, NATO, Turkey, to Cmdr., LCC-Izmir, NATO, Turkey.

MG D.J. Conboy, USAR, from Dep. CG, Eighth U.S. Army, Korea, to Cmdr., 416th Engineer Cmd., Darien, Ill.

MG J.A. Davis from Dir., Current Ops., J-33, USCYBERCOM, Fort Meade, Md., to Sr. Mil. Advisor for Cyber to the USD(P), OUSD(P), Washington, D.C.

MG M.H. Shields from Dir., Future Ops., IJC, OEF, Afghanistan, to Dir., PACC, J-5, Jt. Staff, Washington, D.C.

MG M.R. Smith, USAR, from Cmdr., 800th MP Brigade, Uniondale, N.Y., to Dep. CG, First Army, Rock Island, Ill.

MG S.J. Townsend from Dir., PACC, J-5, Jt. Staff, Washington, D.C., to CG, 10th Mountain Div. (L) and Fort Drum, N.Y.

MG S.G. Trombitas from CG, U.S. Army South, Fort Sam Houston-JB San Antonio, Texas, to Sr. Defense Official/Defense Attaché Mexico, U.S. Embassy, Mexico.

Brigadier Generals: **L.M. Boone** from Dir., PAO, ISAF, OEF, Afghanistan, to Dir., USAPDA, Arlington, Va.; **T.R. Coffin** from Dep. CG (Ops.), SMDC/ARSTRAT, Peterson AFB, Colo., to Dep. Cmdr., JFCC-Space, USSTRATCOM, Vandenberg AFB, Calif.; **M. Garcia,** USAR, from CoS, 200th MP Cmd., Fort Meade, Md., to Dep. Cmdr., 200th MP Cmd., Fort Meade; **U.D. Glanville,** USAR, from Cmdr., 213th LSO, Decatur, Ga., to Cmdr., ROLFF-A, USF-A, Kabul, Afghanistan; **W.B. Hickman** from Dep. CG (Spt.), 101st Airborne Div. (AA), Fort Campbell, Ky., to CG., JRTC and Fort Polk, Fort Polk, La.; **D.P. Hughes** from Dir., System of Systems Integration, APG, Md., to Dep. CG, RDECOM, APG/Sr. Cmdr., NSSC, Natick, Mass.; **M.A. Kloster,** USAR, from Cmdr., 1st Mobilization Spt. Grp.-East, Fort Totten, N.Y., to Cmdr., 98th Div. (IET), Rochester, N.Y.; **R.F. Lewis** from Sr. Military Asst. to the Dep. Secretary of Defense, ODSD, Washington, D.C., to Dep. CG, 101st Airborne Div. (AA), Fort Campbell; **M.W. Palzer,** USAR, Cmdr., 143rd Sustainment Cmd. (Exp.), Orlando, Fla., to Dep. CoS, Logistics, C/J-4, ISAF, OEF; **S.A. Shapiro** from Dir., Materiel Enterprise Integration and Retrograde Ops. Center, USF-A, OEF to Dep. CG, 1st TSC, OEF; **G.S. Yee,** USAR, from Cmdr., 505th TTSB, Las Vegas, Nev., to Dep. Cmdr. for Mobilization (IMA), SDDC, Scott AFB, Ill.

■ ***AA**—Air Assault; **AFB**—Air Force Base; **APG**—Aberdeen Proving Ground; **C4**—Command, Control, Communications and Computers; **CIO**—Chief Information Officer; **CoS**—Chief of Staff; **IET**—Initial Entry Training; **IJC**—International Security Assistance Force Joint Cmd.; **IMA**—Individual Mobilization Augmentee; **ISAF**—International Security Assistance Force; **JB**—Joint Base; **JFCC**—Joint Functional Component Cmd.; **JRTC**—Jt. Readiness Training Center; **LCC**—Land Component Cmd.; **LSO**—Legal Spt. Org.; **MP**—Military Police; **NATO**—North Atlantic Treaty Organization; **NSSC**—Natick Soldier Systems Center; **ODSD**—Office of the Deputy Secretary of Defense; **OEF**—Operation Enduring Freedom; **OUSD(P)**—Office of the Under Secretary of Defense for Policy; **PACC**—Pakistan/Afghanistan Coordination Cell; **PAO**—Public Affairs Office; **RDECOM**—U.S. Army Research, Development and Engineering Cmd.; **ROLFF-A**—Rule of Law Field Force-Afghanistan; **SDDC**—Surface Deployment and Distribution Cmd.; **SMDC/ARSTRAT**—U.S. Army Space and Missile Defense Cmd./U.S. Army Forces Strategic Cmd.; **SUT**—Stand Up Team; **TSC**—Theater Sustainment Cmd.; **TTSB**—Theater Tactical Signal Brigade; **USAPDA**—U.S. Army Physical Disability Agency; **USAR**—U.S. Army Reserve; **USCYBERCOM**—U.S. Cyber Cmd; **USD(P)**—Under Secretary of Defense for Policy; **USF-A**—U.S. Forces-Afghanistan; **USSTRATCOM**—U.S. Strategic Cmd.*

*Assignments to general officer slots announced by the General Officer Management Office, Department of the Army. Some officers are listed at the grade to which they are nominated, promotable or eligible to be frocked. The reporting dates for some officers may not yet be determined.

Physical Fitness Update. U.S. Army Training and Doctrine Command (TRADOC) has scrapped a five-event physical readiness test proposed to replace the current three-event Army Physical Fitness Test. An independent panel of fitness experts commissioned by TRADOC found insufficient evidence to confirm that the new test would predict baseline soldier physical readiness.

TRADOC has determined that linking physical readiness to Warrior Tasks and Battle Drills (WTBD) would yield a more effective measurement and now will oversee a baseline physical readiness study linked to WTBD, which was slated to begin in October and could generate new data on how the Army develops and tests physical fitness. WTBD are fundamental combat skills.

TRADOC is also reinstating the Master Fitness Training (MFT) Program, which was discontinued in 2001. To ensure this program is restored to all Army units, 30 soldiers recently took part in a pilot MFT training course, studying physiology, nutrition and kinesiology, and learning hundreds of exercises. They will then fan out to battalion level first, and as more soldiers become MFT-certified, they will be embedded down to the company level. They will train units on the doctrine in the new Training Circular 3-22.20 *Army Physical Readiness Training* to not only improve performance but also reduce injuries. MFT trainers will also work with their commanders to customize training programs to the needs of the unit and the mission.

2012 AIT PSG. SFC Delroy Barnett has been named 2012 AIT Platoon Sergeant of the Year. Representing the U.S. Army Medical Department Center and School at Fort Sam Houston-Joint Base (JB) San Antonio, Texas. SFC Barnett was chosen from among nine advanced individual training platoon sergeants who competed for the title at JB Langley-Eustis, Va., in September. SFC Barnett received a Meritorious Service Medal and will serve a one-year tour as an enlisted advisor to the deputy commanding general of Initial Military Training at JB Langley-Eustis, offering ground-level experience and insight into the Army's initial entry training program.

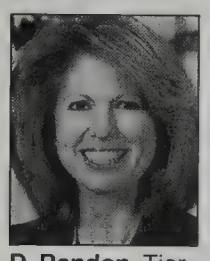
The competition tests the platoon sergeants' knowledge of Warrior Tasks and Battle Drills as well as their ability to teach those tasks to soldiers in a training setting. It includes mental and physical challenges, with the competitors appearing before a board of command sergeants major who evaluate their knowledge of leadership and platoon sergeant training tasks. There are more than 700 Army platoon sergeants currently serving at 24 AIT schools and training centers.

USMA Professor Honored. Dr. Elizabeth Samet, professor of English at the U.S. Military Academy at West Point, N.Y., received the 2012 Hiett Prize in the Humanities from the Dallas Institute of Humanities and Culture in October. The $50,000 award recognizes an emerging leader in the humanities whose work shows extraordinary promise.

Dr. Samet, who has taught at West Point for more than 15 years and became a full professor of English there in 2007, is the author of *Willing Obedience: Citizens, Soldiers and the Progress of Consent in America, 1776–1898* and *Soldier's Heart: Reading Literature Through Peace and War at West Point.* Another book, *No Man's Land,* awaits publication. Dr. Samet is currently writing *Crimes of Odysseus: Imagining Postwar America* with the support of a Guggenheim Fellowship.

The Hiett Prize is an annual award first presented in 2005. The Dallas Institute of Humanities and Culture, created in 1980, is a center for creative

SENIOR EXECUTIVE SERVICE ANNOUNCEMENTS



D. Randon, Tier 3, from Dir., Installation Services Directorate to Dep. ACSIM, both HQ Dept. of the Army, OACSIM.

J. R. Robinson, Tier 3, from Regional Dir. (Central), IMA, San Antonio, Texas, to PDASA (IE&E), OASA (IE&E), Washington, D.C.

P.B. Bechtel, Tier 2, from Dep. Dir. for Plans and Policy to Dir., Capabilities Integration Directorate, both ODCS G-3/5/7, the Pentagon, Arlington, Va.

R. M. Holcomb, Tier 2, from Dep. CoS for Resource Mgmt., FORSCOM, Fort Bragg, N.C., to Dir., Force Development & Resources, USASOC, Fort Bragg.

B.E. Toland, Tier 2, from Dep. Cmd. Counsel to Cmd. Counsel, both HQ, AMC, Redstone Arsenal, Ala.

Tier 1: **J.R. Hannon** from Regional Business Dir., Southwestern Div., USACE, Dallas, Texas, to Chief, Ops. and Regulatory Community of Practice, USACE, Washington, D.C.; **T. Marks** from Exec. Dir. for the LOGCAP, AMC, Rock Island, Ill., to Exec. Dir. for Acquisition Services, OASA (AL&T), Washington, D.C.; **R.E. Slockbower** from Dir. of Military Programs, USACE, Washington, D.C., to Div. Programs Dir., Southwestern Div., USACE, Dallas, Texas.

■ ***ACSIM**—Assistant Chief of Staff for Installation Management; **AL&T**—Acquisition, Logistics and Technology; **AMC**—U.S. Army Materiel Cmd.; **CG**—Commanding General; **CoS**—Chief of Staff; **FORSCOM**—U.S. Army Forces Cmd.; **HQ**—Headquarters; **IE&E**—Installations, Energy and Environment; **IMA**—U.S. Army Installation Management Agency; **LOGCAP**—Logistics Civil Augmentation Program; **OACSIM**—Office of the ACSIM; **OASA**—Office of the Asst. Secretary of the Army; **ODCS**—Office of the Deputy Chief of Staff; **PDASA**—Principal Dep. Asst. Secretary of the Army; **USACE**—U.S. Army Corps of Engineers; **USASOC**—U.S. Army Special Operations Cmd.*

and intellectual exchange in Dallas, Texas.

Library of Congress Offerings. A free Library of Congress exhibition commemorating the 150th anniversary of the Civil War will open on November 12 in Washington, D.C., and a new installment highlighting wartime stories of Vietnam veterans is now available on its website.

"The Civil War in America," which contains more than 200 items, many never displayed in public before, will run until May 23, 2013. The items in the collection reflect the many ways the North-South struggle helped shape the nation and its people as well as offer a human perspective on the conflict. The exhibit includes a broadside edition of the Emancipation Proclamation (one of only 48 printed) signed by President Abraham Lincoln, Secretary of State William H. Seward and presidential secretary John G. Nicolay; a letter from Mary Todd Lincoln reflecting the depth of her grief at the loss of her 11-year-old son, Willie Lincoln, to typhoid fever in 1862; and a hand-colored cartoon map depicting Union GEN Winfield Scott's envelopment strategy for fighting the Confederacy.

The second installment of the Library of Congress Veterans History Project (VHP) Experiencing War website presentation—"Vietnam War: Looking Back, Part 2"—is now online. Like Part 1, launched in May, it includes videos, audio interviews, memoirs and photographs from members of the various armed services. Among them is the story of then-CPT Floyd Harold Kushner, a flight surgeon with 1st Cavalry Division (Airmobile), who had been flying combat missions for three months when his helicopter crashed in enemy territory in November 1967. Along with the beatings inflicted on him and malnutrition as a prisoner of war, Kushner fought the frustration that resulted from being forbidden to treat his fellow inmates.

Janis Alyce Nark, who served with the 44th Medical Battalion, Army Nurse Corps in Cam Ranh Bay, explains how she grappled with and recovered from post-traumatic stress disorder.

In a video interview, Arthur B. Witnik Jr. describes how he arrived in Vietnam as a "shake and bake" staff sergeant with no combat experience, whose job was to lead a squad of experienced soldiers and who fought with them in the 1969 Battle of Hamburger Hill.

The exhibit is at: http://www.loc.gov/vets/stories/ex-war-vietnam50-part2.html.

War Photos Exhibit. "WAR/PHOTOGRAPHY: Images of Armed Conflict and Its Aftermath," an unprecedented collection of objects exploring the experience of war through the eyes of photographers, opens on Veterans Day at the Museum of Fine Arts, Houston, Texas, then will travel to Los Angeles, Calif.; Washington, D.C.; and Brooklyn, N.Y.

"WAR/PHOTOGRAPHY" is a collection of nearly 500 items, including photographs, books, magazines, albums and photographic equipment. More than 280 photographers from 28 countries contributed to the exhibit, covering conflicts on six continents from the Mexican-American War of 1846 through today's operations. Rather than display a chronological survey of wartime photographs, the collection presents the types of photographs repeatedly taken during many phases of war, from the actions that led to armed conflict to the actual conflict, then victory and defeat. Images on display range from classics such as Yousuf Karsh's 1941 image of Winston Churchill and Joe Rosenthal's "Old Glory Goes Up on Mount Suribachi, Iwo Jima" to previously unknown ones.

On opening day, November 11, the exhibit is free to all visitors in recognition of Veterans Day; it remains free to active duty servicemembers and veterans for the duration of the exhibition. For more information, visit www.mfah.org/wp.

New Fisher House. The Fisher House Foundation, best known for the homes it donates to the military and Department of Veterans Affairs (VA) where families can stay for free while loved ones are receiving treatment, broke ground on a new 12-room comfort home at Murfreesboro, Tenn., in September. The 10,000-square-foot Fisher House, the first in the state, will join the network of facilities built by the Fisher Foundation and operating in the United States and Germany.

Located close to the medical center or hospital it serves, a Fisher House consists of eight to 12 suites, each equipped with private bedrooms and baths, and a common kitchen, laundry facilities, dining room and living room.

At the ground breaking, Tennessee Valley Healthcare System (TVHS) Director Juan A. Morales said, "This is an exciting time for VA TVHS. Veterans and the community have worked for this project for quite some time and to see it become a reality demonstrates their commitment to veterans and their families." ★

Correction

GEN Dennis L. Via's rank was incorrect in his Status Report in the October—GREEN BOOK—issue. GEN Via received his fourth star upon assumption of duty as commanding general, U.S. Army Materiel Command, in August. We regret the error.

GEN Dennis L. Via

National Strategy: Another Look

By GEN Frederick J. Kroesen
U.S. Army retired

The Department of Defense strategic guidance, *Sustaining U.S. Global Leadership: Priorities for 21st Century Defense*, followed by the adoption of AirSea Battle, prescribes the concept of our military strategy from now through 2020. Much comment, many columns, and reams of advice and counsel have generated immeasurable and uncounted discussions, arguments and critiques among military personnel, particularly in the Army because the documents are almost mute concerning a combat role for the land forces.

First, of course, is the charge that the Navy and Air Force are striking first to guarantee a large share of the DoD budget, an argument that ought to be ignored, presuming the concept will be supported only on its merit, not on its preemption.

Advocates include those who have always promoted control of the air and seas as the decisive components of modern war. Today they represent those who, in the 1940s, maintained that with a growing, more lethal airpower and a little more time, the D-Day invasion of Europe would have been unnecessary. Thousands of lives could have been saved as the German government realized the total destruction impending and surrendered just as the Japanese did after the introduction of the atomic bomb. That claim still has credibility in some quarters notwithstanding the destruction of Berlin, Hamburg and a large number of other cities reduced to rubble before and after the invasion.

Others believe the strategy meets the primary requirement of defeating enemy air, missile and naval capabilities that would deny entry into Western Pacific regions, where we would wish to support allies or prevent the unwanted expansion of an enemy influence. It is an effective argument: If you can't get there, you can't employ military power to achieve your goals or protect your interests. But the contention also raises the question that if you don't have the follow-on force to complete the mission, why are you going in the first place? The strategy prescribed seems to foreclose on having U.S. landpower for that phase.

Richard Sinnreich, in the September issue of ARMY, observes that the strategy is akin to President Nixon's Guam Doctrine: Guarantee our treaty commitments; provide a nuclear shield for friends and allies; and when requested, provide military and economic assistance to friendly nations who will furnish the bulk of manpower required for their own defense.

That third commitment was not a new thought. We ended combat in Korea with Korean Augmentation Troops to the U.S. Army furnishing platoons of soldiers, assigned to many American units, who fought as organic elements of our divisions. "Vietnamization" was the program of replacing American ground forces with Army of the Republic of Vietnam units to carry on that war. Since then numerous inquiries, studies and other proposals advocating those kinds of force development programs have been popular, but in no case have we convinced other nations to fight the ground war for us. And in every case since—Grenada, Panama, the Persian Gulf, Iraq, Afghanistan—the landpower element was not only needed, it was the largest element, it was the decisive force and it was overwhelmingly American. In every case the Guam Doctrine's third principle either failed or was ignored.

To express our National Military Strategy as primarily a plan to control the air and seas and employ long-range firepower not only flies in the face of history but also limits the ability of our nation to influence the developing world. It ignores the wars we are engaged in: Afghanistan and the war on terrorism. Whatever its name, it is probably a generational problem. It ignores the threats to nations with whom we have treaty commitments: Israel, South Korea, Japan. It ignores the block of Latin nations forming an anti-American alliance, building a military threat with weapons and capabilities being made available and supported by and through an infrastructure already introduced by China and Russia. It provides little guidance to the existing unified and combined command components, even the U.S. Pacific Command, which has wide territorial responsibilities beyond the Asia-Pacific region.

It is difficult to conjure the conduct of war in any of the threat areas without the need for landpower, both Army and Marine Corps. To commit a too small army to a primary mission of training other armies to fight is to ensure degradation of its capabilities to cope with the broad spectrum of warfare. More seriously, it risks another future commitment of forces inadequate to the task, a Bataan Death March or another Task Force Smith. Coupling that demand, after years of repetitive combat and other hardship tours, with a plan requiring the continuing rotation of brigades, battalions, companies or training teams away from home stations and families is a plan that continues the stressful environment the Army has been living in for more than the past decade. Add the unpopularity and disruption associated with the social issues introduced and the impact on the Army is difficult to predict.

This is not to oppose the AirSea Battle concept. The need for air and naval supremacy is absolute and must be supported. Instead this is an expression of the need to expand the scope of our military strategy, address the threats and define the role of our

land forces. That will at least help Army leaders deal with the oft-heard complaint that they do not clearly produce a vision for the future. When you don't know what you are supposed to do it is hard to develop a concept of how to do it. □

GEN Frederick J. Kroesen, USA Ret., formerly served as Vice Chief of Staff of the U.S. Army and commander in chief of U.S. Army Europe. He is a senior fellow of AUSA's Institute of Land Warfare.

Army Acquisition: Let's Light a Few Candles

By BG James R. Moran
U.S. Army retired

We have read or personally experienced the many trials and successes—yes, successes—of Army acquisition. There have also been so many Department of Defense studies that the mantra of "acquisition reform" would be better referred to as "50 years of uninterrupted acquisition reform." Unfortunately, the net enacted result of these studies is often more drama and theater than real progress. Real acquisition reform would include an extensive list of policies, procedures and regulations that are being eliminated or significantly reduced, yet we haven't seen anything like that in the past 50 years of published reforms.

Successful Army acquisition is all around: Abrams, Apache, Patriot, Soldier Systems, Stryker, digitization and many more. One cannot believe that there is a commander today who would trade his systems or kit for any other country's. Accordingly, our systems and kit are the envy of the world. Can it be executed more effectively and efficiently? There is only one answer: Of course.

Government acquisition is never going to be elegant. Frankly, there are too many interested, influential and powerful political and industrial constituents. There is also an extensive and entrenched government cottage industry of checkers (and checkers who check checkers) and reviewers (and reviewers who review reviewers). One can only hope that someday more of the checkers and reviewers could be made doers in execution organizations.

None of these are going away to make government acquisition look anything like commercial acquisition. For all its blessings and curses, it's just the "American way." I often tell folks if they don't like it, then adjust or go home. Going home would be the easy alternative. There are some things we can do, however: putting on your armor, gathering up some moral courage and lighting some candles in the dark.

Requirements and Funding

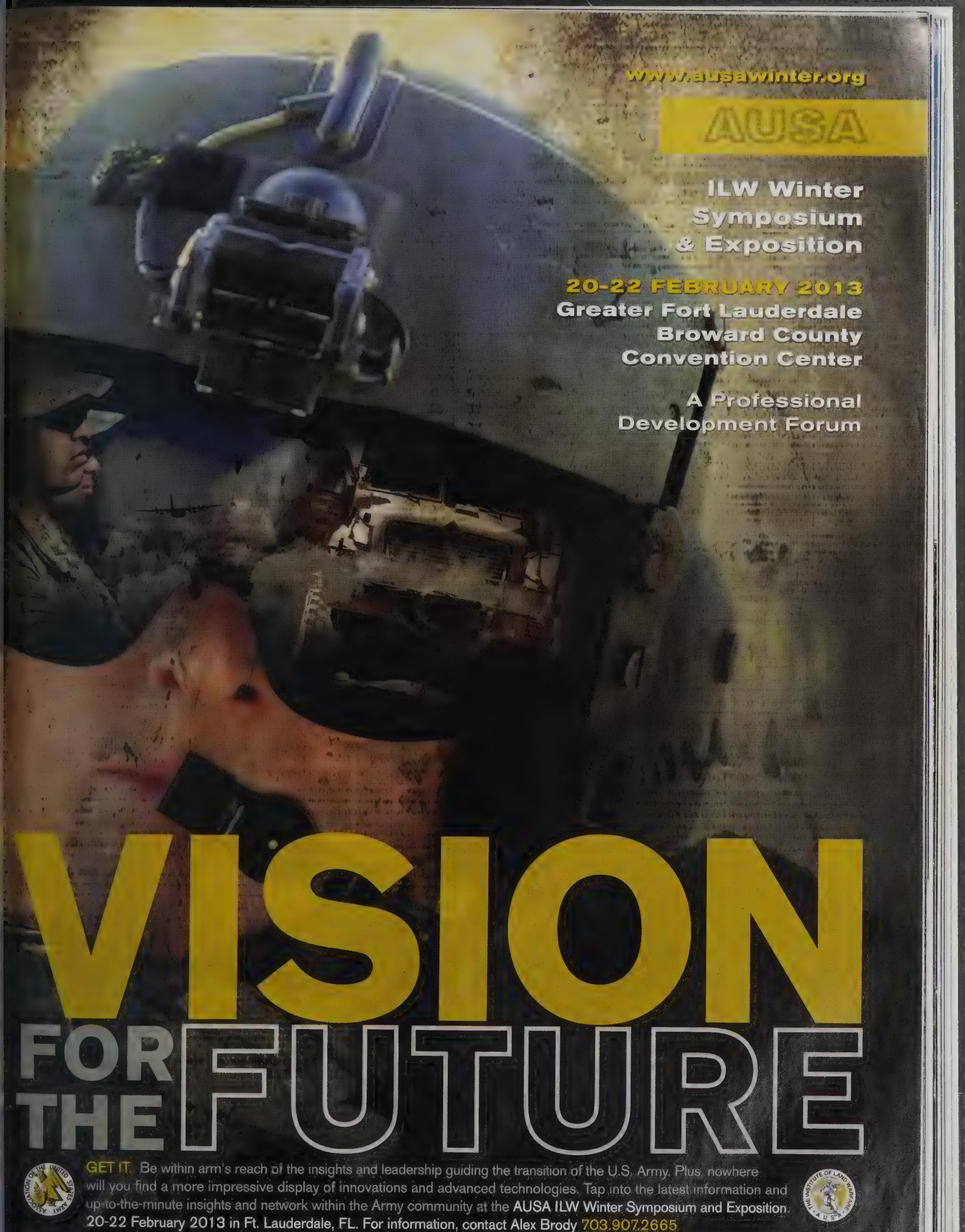
It would be helpful if we could address two important variables: requirements and funding. As mentioned, there have been 50 years of uninterrupted acquisition reforms. I think the time is long overdue for a couple of years of requirements reform. The kind of reform we are talking about is not just the Joint Capabilities Integration and Development System process. It involves making sure that requirements are achievable, given the state of technology. Making sure the requirements are stable is also critical. Don't drastically change just because the person in charge changes. Requirements also need to be operationally and technologically driven, not personality driven. Some of the common requirements areas that need to be considered for improvement include unfounded willingness to accept the promise of "leap ahead technology," unrealistic initial cost and schedule estimates, and untrained/unqualified requirements generators.

Correspondingly, the funding needs to be adequate—that is, realistic—given the desired technical capability and schedule. Joint Strike Fighter (JSF) is a perfect example of failure in both of these areas. Folks are more than ready to point out Army-challenged programs, but the JSF cost overruns are almost 10 times all the money spent on Comanche, Crusader and Future Combat Systems combined. And let's not even mention the F-22. If JSF were an Army program, then it would have probably long since been killed. It must be nice to have a Wall Street bank-like stature—simply too big to fail. Don't mind the splinter in my eye; address the log in your own eye. The Army will never experience this largess.

Understand the Sand Table

Government acquisition needs to be viewed for what it is: a public enterprise, not a military operation. Understanding this concept is essential to not getting drawn into seemingly endless rhetoric of sarcasm and cynicism: Sarcasm and cynicism will make you feel better but will not achieve the objective. Without the appreciation of this reality, one will be disappointed and frustrated. We all need to understand the different enablers and impediments to successful acquisition. I am not saying you have to like it, but that you must understand it—despite the sheer volume of acquisition regulations and statutory requirements that could literally be measured in linear yards.

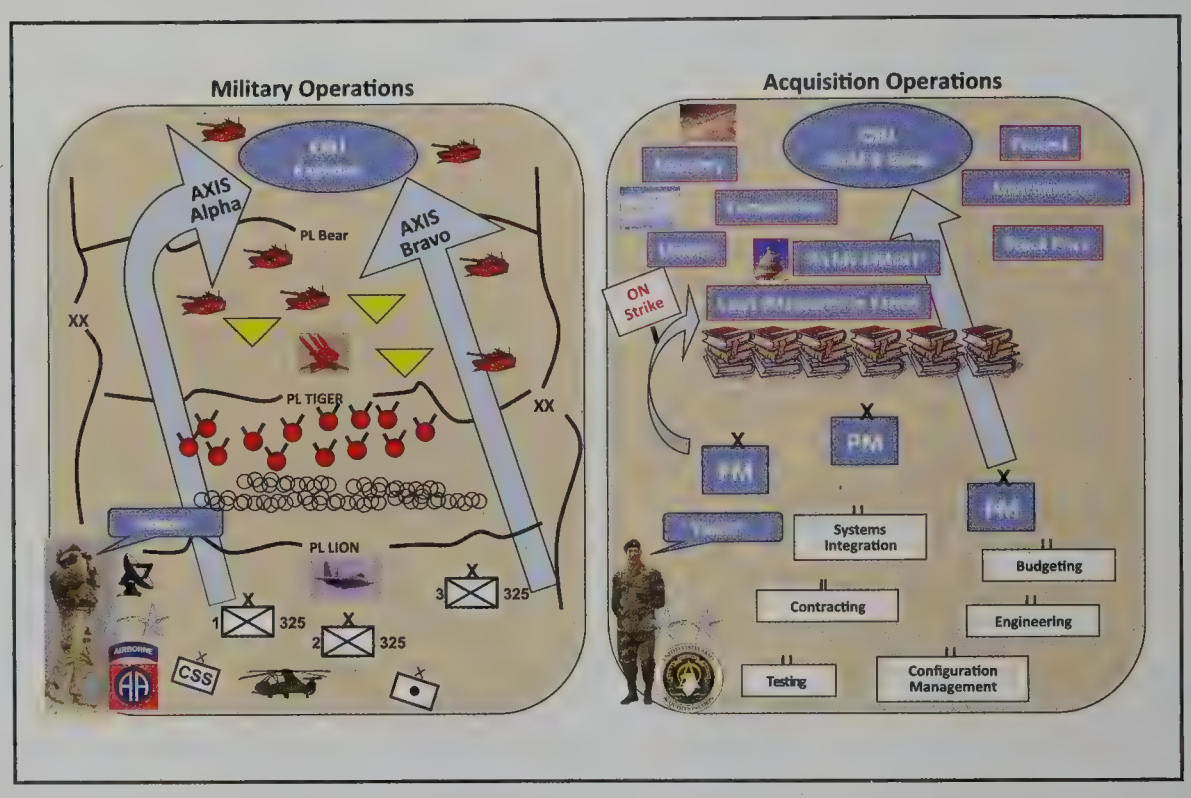
There also needs to be some self-examination and awareness of who comprises and participates in the acquisition process to better understand their responsibility and accountability. Basically, it all comes down to this: Within the Army you are a part of the acquisition process if you write a requirement (U.S. Army Training and Doctrine Command), approve a requirement (Army G-3), provide resources for a product (Army G-8), provide legal oversight (Office of General Counsel), write or administer a contract (U.S. Army Contracting Command), test a product (U.S. Army Test and Evaluation Command), support a product (U.S. Army Materiel Command), pursue science and technology (U.S. Army Research, Development and Engineering Command), and so forth.


www.ausawinter.org
AUSA
ILW Winter
Symposium
& Exposition
20-22 FEBRUARY 2013
Greater Fort Lauderdale
Broward County
Convention Center
A Professional
Development Forum
VISION
FOR THE FUTURE
GET IT. Be within arm's reach of the insights and leadership guiding the transition of the U.S. Army. Plus, nowhere will you find a more impressive display of innovations and advanced technologies. Tap into the latest information and up-to-the-minute insights and network within the Army community at the AUSA ILW Winter Symposium and Exposition 20-22 February 2013 in Ft. Lauderdale, FL. For information, contact Alex Brody 703.907.2665

All of those who set or influence the boundary conditions from the cradle to the grave of the acquisition process are themselves vital and essential parts of acquisition. Too often individuals or organizations are more than willing to give guidance and direction yet unwilling to accept any accountability for their input, notwithstanding the cumulative effect of all the combined guidance and direction.

Similar to maneuver brigade, acquisition formations need varied types of project offices given the state of the program, such as development, production and sustainment.

Compared to the project offices of the Big Five, today's are not adequately manned. This is a strong but correct assessment. For example, the Abrams project office of the past had, either as core or via matrix, some uniformed enablers back into the key weapons systems project offices. They need not be part of the acquisition corps. In time of national emergency they could return to deploying units. Meanwhile, they could provide day-to-day influence, practical experience, technical-domain knowledge and program execution support. They need to physically sit in the project office—not be on call and not remotely networked to the playing field. Virtual presence is actual absence. At most, this is a few hundred positions that will have—and have had—a dramatic impact on Army systems acquisition.



Structural Enablers

The Army had the "Big Five," and we rightfully look back on them with pride. They all had their issues at one time or another: Bradley with survivability challenges, Abrams initially with the turbine engine and so on. When we hear some of the questions about why project offices seemed to work better at executing systems in the past than now, there are a few contributing factors. One is the project management office. Today's project offices are lacking some key enablers. It is interesting that the Army has done so many studies on the proper composition of the various types of maneuver brigades—for good reason—but none, to our knowledge, on project offices. Fittingly, we want to make sure the maneuver brigades have the right mix of capabilities (maneuver, fires, scouts, support and so on) and that the Army has the right mix of brigade types (light, heavy, airborne, Stryker, support and so on).

The Army needs to conduct a comprehensive, independent analysis of the actual roles and missions of current program offices and then determine the correct functional composition and size given the state in the life cycle of the specific system. This recommendation should not be yet another cut drill, as is usually the case, but a systematic analysis matching missions being executed with the appropriate functional assets necessary to enable successful execution.

More Candles

The acquisition system is never going to be optimal. We really don't like to admit that the best we can do on our watch is offer constructive regulatory and legislative recommendations that will probably not be enacted, and then work every day to try to make it better merely by lighting some candles. Some of these candles are realistic requirements and funding, understanding the sand table, and properly staffing project offices. The Goldwater-Nichols Act is often blamed as the root cause of today's issues because it realigned acquisition responsibilities. Some have referred to it as lost authority or ability to influence. While that probably is a contributing factor, there are other actions we could implement now to begin helping ourselves by bringing light to this critical function, ensuring U.S. Army forces are the best equipped in the world on the battlefields of tomorrow. □

BG James R. Moran, USA Ret., has diverse and extensive systems management experience, including radar, command and control, air defense, individual soldier, military sales, and combat vehicle programs. He has served with U.S. Army Space Command and as commandant of the Defense Acquisition University. A graduate of the U.S. Military Academy at West Point, he has master's degrees from the Industrial College of the Armed Forces and the Air Force Institute of Technology.

Early Bird Exhibit Space Rates Now Available

The Association of the United States Army's Institute of Land Warfare

ARMY AVIATION SYMPOSIUM AND EXPOSITION

A PROFESSIONAL DEVELOPMENT FORUM

9-11 JANUARY 2013

NATIONAL HARBOR, MARYLAND

Will You Recognize U.S. Army Aviation in 2020?

Engage with the broadest expertise as the Army modernizes and transforms.

- PM and PEO perspectives on experience, needs and direction
- Learn about critical performance under dynamic field conditions
- Discuss equipment and technology as part of modernization

Visit www.ausa.org for more information.

AUSA, Industry Affairs: 800-336-4570, ext. 2665

Who and What Is a Veteran?

By MG Guy S. Meloy
U.S. Army retired

Several years ago, a neighbor of mine volunteered to sell Veterans Day poppies. In talking with her later, she told me that a young woman with a small child stopped and asked, "I'd love to buy a poppy from you, but I don't know what it's for."

My neighbor told her, "It's in honor of Veterans Day."

"Oh," the young woman said, "that's nice, but what's a veteran?"

I regret to say that some of our own veterans' organizations don't always seem too sure what a veteran is, either. As an example, several years ago in an article in *The American Legion*, a veteran was defined as a person who served in the active military, naval, or air service and was discharged from the service under conditions other than dishonorable. That may be a legal definition, but it would be a literary challenge to come up with a more waffled definition.

Not long ago I was asked to address the kids at a middle school during a Veterans Day ceremony in the school gym. I don't know how long it's been since you were in the halls of a middle school, but to be surrounded by so many bright youngsters who already know more about high tech than I'll ever know is kind of intimidating. When I concluded my remarks, I made the mistake of asking if anyone had any questions. That's when I discovered they were not only very bright but also were not the least bit bashful. I was bombarded from all sides, but almost every question indicated their confusion. One asked, "My daddy is a policeman; does that make him a veteran?" Another asked, "Are sailors veterans, too?" One skeptic wanted to know if it was okay for a teacher to also be a veteran. I almost cheered when one young girl said she thought "a veteran is someone who joined the Army."

After thinking about my neighbor's comments when she was asked what a veteran was, and the questions asked by the middle school children, I realized there were a lot of different and too-often wrong opinions of what makes a veteran, and because so many of the opinions were kind of cockeyed, I decided the term *veteran* needed a more specific explanation. What follows is my definition.

Veterans are the more than 575,000 soldiers, sailors, airmen and marines who have been killed in action fighting for freedom; the more than 1,600,000 wounded in action; and the several million others who for the past 236 years have served our country in peace and war, and to whom our nation pays special tribute on only one day a year.

When asked who—and what—are veterans, I say with considerable pride that we are the direct descendants of this great country's first army: the Minutemen who fought at Bunker Hill, the beat-up-but-never-say-quit troops of the Continental Army at Valley Forge and Yorktown, and "damn the torpedoes, full speed ahead." Later we knew the defense of Fort McHenry and the Battle of New Orleans, the Alamo and San Jacinto, Tripoli, Veracruz, and the Halls of Montezuma. And no matter the color of our uniform or the flag we carried, we were also at Manassas, Vicksburg and Gettysburg. Our heritage also includes Manila Bay, San Juan Hill and Teddy Roosevelt's Rough Riders, and in "the war to end all wars" we knew the Marne, St. Mihiel, the Meuse-Argonne and the Belleau Wood.

Show us a map of the world, and we can point out names and places that until December 7, 1941, few of our friends, or even our teachers, ever heard of: Wake Island, Bataan, Corregidor, an appalling POW camp called Cabanatuan, Midway and Guadalcanal, North Africa and Sicily, Anzio, Salerno, and Normandy, the Coral Sea and Tarawa, the Ploesti oil fields, Schweinfurt, the Ruhr, the Danube, the Po Valley, the Flying Tigers, Merrill's Marauders, and The Hump.

We knew New Guinea, Saipan, Saint-Lô and Burma, and we also knew all too well the steep, rocky cliffs of France and bodies floating on the tides and surf of Normandy's beaches. We've been to Iwo Jima and Nijmegen, crossed the Rhine and Main Rivers, fought in the bone-deep cold of the Bulge and at Bastogne. We knew Southern France and Guam, Luzon and Manila, the Ardennes and Dachau and Auschwitz, a date called V-E Day, a large island named Okinawa, and then finally Tokyo Bay and another famous date known as V-J Day.

Just five years later we learned to spell and pronounce strange names like the Kum, Han, Imjin and Yalu Rivers, the Pusan Perimeter, Inchon, and the Frozen Chosin. ("Retreat hell, we're just attacking in a different direction.") And we also got to know the names of some made-in-hell hills like Heartbreak Ridge and Pork Chop Hill, a bridge named Freedom, a small village named Panmunjom, and an imaginary line on the ground someone labeled a DMZ.

A few years later it was Lebanon, then the Mekong Delta, Mekong River, Ia Drang, A Shau and Bon Song Valleys, Hue, Phu Bai, Quang Tri, Dong Xai, Pleiku and Phuc Vien, and let's not forget War Zones C and D or the Iron Triangle, and then Tet and Hamburger Hill. More strange terms were added to our vocabulary like dust-off, RPG [rocket-propelled grenade], lima zulu and papa zulu, claymores, good copy, alpha alphas, bounce max, frantic shouts of "Smoke out!" to save a buddy's life, DEROS [date eligible for return from overseas] and freedom bird, and 58,000 more killed in the name of freedom.

Just as we started to sit back and relax, we learned where Grenada was, and once more we sent our sons and daughters to fight, this time in Panama, Kosovo and Bosnia and to liberate Kuwait. For about eight years we fought in Iraq and over the past 11 years in Afghanistan. Year after year we sent courageous and dedicated troops to lay their lives on the line to help build nations in places like Kirkuk, Baghdad and Fallujah, and Kabul and Kandahar—American troops absent from home and families and loved ones for a year, home oftentimes for less than six months, then deployed yet again for a year, many for the third

time—and too many politicians, including one former secretary of defense, who callously claim, "So what? That's what they're being paid to do."

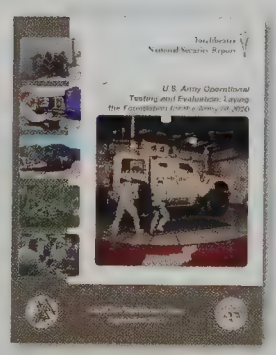
Who and what are we? We are people who at one time in our lives had plenty of practice working long before dawn to long after dark. We are people who know what it's like to fight and see friends wounded or killed. We are people who lived around the clock for days on end without hot meals, clean clothes, showers, sheets or flush toilets. We are people who could field strip a rifle or machine gun in 30 seconds, clean then reassemble it in less time—and do it in the dark. And while we often did not have time to brush our teeth, we are people who always found time to clean and maintain our weapons, our tanks, our airplanes and our ships. Maybe as we were growing up we did not always share our things with a brother or sister, but in the midst of battle we never hesitated to share anything and everything with our buddies on our right and left, carry in our arms a wounded soldier to a medevac helicopter or a shipmate to sick bay, or fly tight to escort a shot-up wing man.

I like to remember that it is veterans, not politicians or judges, who are the guardians of the individual rights of every American, and while the politicians start wars, it's the veterans who fight, win and end them. Veterans, not ministers or priests or rabbis, gave our country freedom of religion. It's not the media but our veterans who are responsible for First Amendment free speech and free press. What's even more important: It is the nation's veterans who are singularly responsible for ensuring that the Declaration of Independence and the Constitution are more than empty rhetoric.

We paid our dues, and we did so without flinching because we loved our country and were willing to put our lives on the line to prove it. Just as our fathers and grandfathers and our great grandfathers, we took an oath and solemnly swore to defend the Constitution of the United States of America against all enemies, foreign and domestic. We made a promise to the American people to defend them and protect their freedoms, and we delivered on that promise. It's good to stop from time to time and recognize that every veteran has earned (but does not always receive) our nation's grateful admiration and respect. They earned it with their dedication, with their courage—oftentimes with their blood—and they earned it with duty well done. □

MG Guy S. Meloy, USA Ret., served in various command and staff positions over the course of his Army career. He commanded four platoons, three companies, two battalions—one for six months as a major, the second for 12 months as a lieutenant colonel, both in Vietnam—and a brigade. He was an assistant division commander and commander of the 82nd Airborne Division as well as director of training in the Office of the Deputy Chief of Staff for Operations and Plans.

PUBLICATIONS
from the Institute of Land Warfare



Land Warfare Papers
- **LWP 91 – Irregular Warfare: Counterterrorism Forces in Support of Counterinsurgency Operations** by William B. Ostlund (September 2012)[1,4]
- **LWP 90W – General Matthew B. Ridgway: A Commander's Maturation of Operational Art** by Joseph R. Kurz (September 2012)[2]
- **LWP 89 – Distilling the Demographic Dividend: Retaining U.S. Army Officer Talent for the 40-year Career?** by Lieutenant Colonel Kevin D. Stringer (June 2012)[1]
- **LWP 88W – The Spider Webs and the Lion: How Energy and Environmental Issues Entangle China** by Colonel Mark Lee (May 2012)[2]
- **LWP 87 – Historical Lessons Applied to the Current Technical Revolution in Military Affairs** by Major Benjamin Huebschman (March 2012)[1]
- **LWP 86 – Applying Natural System Metaphors to the Force Modernization Process** by Colonel K. Todd Chamberlain (February 2012)[1]

National Security Watch
- **NSW 12-4 – Earned Deferred Compensation** by Nicholas R. Krueger (August 2012)[1]
- **NSW 12-3 – Linking Latin America and the Pacific: A Strategy for the Long Term** by Douglas J. Schaffer (July 2012)[1]
- **NSW 12-2 – The Rationale for a Robust U.S. Army Presence in the Pacific Basin** by Nicholas Krueger (March 2012)[1]

NCO Update
- **Summer Brings Free Passes and Special Deals to Servicemembers**[3] (3rd Quarter 2012)[1]
- **Budget Cuts Affect NCOs' Reenlistment Opportunities**[3] (2nd Quarter 2012)[1]

Special Reports
- **Profile of the U.S. Army 2012: a reference handbook** (June 2012)[1]
- **AUSA + 1st Session, 112th Congress = Some Good News** (January 2012)[1]
- **Your Soldier, Your Army: A Parents' Guide** by Vicki Cody (also available in Spanish)[1]

Torchbearer National Security Reports
- **U.S. Army Testing and Evaluation: Laying the Foundation for the Army of 2020** (September 2012)[1]
- **A New Equipping Strategy: Modernizing the U.S. Army of 2020** (June 2012)[1]
- **Modernizing LandWarNet: Empowering America's Army** (May 2012)[1]
- **U.S. Army Space Capabilities: Enabling the Force of Decisive Action** (May 2012)[1]

Torchbearer Issue Papers
- **First Army: Training for Today's Requirements and Tomorrow's Contingencies** (April 2012)[1]
- **Third Army: Empowering Theater Responsiveness by Synchronizing Operational Maneuver** (March 2012)[1]

Torchbearer Alerts
- **Breaking the Faith** (February 2012)[1]

Defense Reports
- **DR 11-4 – Unleashing Unlimited Potential: The Army Warrior Care and Transition Program in 2011** (October 2011)[1]

Landpower Essays
- **LPE 11-2 – Laying the Groundwork for the Army of 2020** by General Robert W. Cone (August 2011)[1]

All publications are available free of charge at:
www.ausa.org/publications/ilw

To order these and other ILW publications, visit the Institute of Land Warfare at the AUSA website (www.ausa.org); send an e-mail to **ILWPublications@ausa.org**; call (800) 336-4570, ext. 4630; or write to AUSA's Institute of Land Warfare, ATTN: Publication Requests, 2425 Wilson Boulevard, Arlington, VA 22201-3326.

[1] Available on AUSA website at www.ausa.org/ilw.
[2] Available ONLY on AUSA website at www.ausa.org/ilw.
[3] Lead story.
[4] Winner of the 2012 AUSA/Army Capabilities Integration Center (ARCIC) writing contest.

THE ASSOCIATION OF THE UNITED STATES ARMY'S INSTITUTE OF LAND WARFARE

9-11 APRIL 2013

LANPAC
SYMPOSIUM & EXPOSITION

HONOLULU, HI

LAND FORCES: ASSURING STABILITY AND SECURITY IN THE PACIFIC

A world-class international event highlighting the role of land forces in the Asia-Pacific theater in peace and war.

Be part of the discussion as Industry and the U.S. interagency team examine the essence of a whole-of-government approach to ensuring the nation's security.

TOPICS TO BE COVERED INCLUDE

- Information warfare and cyber activities
- Leveraging training with technology
- Partnerships with nongovernmental organizations
- Humanitarian assistance and disaster response

SAVE THE DATE

Visit www.ausa.org for more information.

AUSA, Industry Affairs 703.907.2665

Historically Speaking

Defense Transformation Redux

By BG John S. Brown
U.S. Army retired

Defense transformation, although not necessarily referred to by that term, again seems to be in the news. We note with interest that the Joint Chiefs and regional commanders have conducted strategic seminars three times this year, walking over a world map larger than a basketball court while pondering the emerging security environment and appropriate responses to it. Pundits have picked up on the theme. In a *National Journal* article, "The Interwar Years," James Kitfield examines earlier defense efforts to downsize and transform. Although some of his history is wrong, his appreciation of recurrent topics worthy of concern is on the mark. In a *Government Executive* article, "The Next War," Sydney J. Freedberg Jr. discusses current approaches, particularly contrasting the high-tech AirSea Battle favored by the Navy and Air Force with the hybrid warfare envisioned by the Army and, perhaps, the Marines. While we are not yet experiencing the intensity of discussion concerning defense transformation of a dozen years ago, interest in the subject is clearly rising.

It may be useful to draw lessons from our past. In *Kevlar Legions: The Transformation of the U.S. Army, 1989–2005*, I argue that "the United States Army attempted, and largely

From left to right, GEN Gordon R. Sullivan, Army Chief of Staff from 1991–95, and GEN Carl E. Vuono, who served in the position from 1987–1991.

achieved, a centrally directed and institutionally driven revolution in military affairs relevant to ground warfare that exploited Information Age technology, adapted to post-Cold War strategic circumstances, and integrated into parallel joint and Department of Defense efforts." Compared and contrasted with the more than half-dozen parallel transformative efforts extending back through the Civil War, the evolution of our contemporary Digitized Expeditionary Army comes across as a considerable achievement with respect to effectiveness and efficiency. Surely there are lessons to be drawn from this previous experience that may be of use to those *now* on the basketball court. I propose six.

There Will Be No Time-out from Readiness

This expression became famous for its prescience after it appeared in GEN Gordon R. Sullivan's arrival speech as Chief of Staff of the Army in 1991. The Cold War was over. Somalia, Haiti, Bosnia, Kosovo, and scores of lesser contingencies soon followed. These were not foreseen. Despite downsizing and plummeting budgets, the Army got busier. Projecting forward, we have not gotten cleanly away from Iraq—nor will we get cleanly away from Afghanistan. Turmoil in the Middle East makes at least a dozen scenarios requiring intervention plausible, not to mention security responsibilities throughout the rest of the world. If past is precedent, the Army and Marine Corps will be the services most decisively engaged—by overwhelming margins. Current missions will necessarily trump hypothetical future ones. Preoccupation with near targets can cause one to miss far ones, however.

A historical parallel exists in the Interwar British Army, which was so busy policing its empire it gave scant attention to the type of warfare the Germans were singularly preparing to wage. Between 1989 and 2005 Army Chiefs of Staff used various means to keep the far horizon in view. These included their marching orders to U.S. Army Training and Doctrine Command (TRADOC) and U.S. Army Materiel Command (AMC), the internal organization of those agencies and the Army Staff, and such temporary initiatives as the modern Louisiana Maneuvers, Force XXI and the Objective Force Task Force.

Transformation Is Not About Technology Alone

Americans tend to favor technical solutions. Kitfield and Freedberg suggest this remains true, as does the notion about a new way of war emerging from recent operations in Libya and over Pakistan. Army Chief of Staff GEN Carl E. Vuono (1987–1991) cautioned against such a narrowness of view and promulgated Army imperatives of doctrine, force mix, modernization, training, leader development and quality people. Subsequent Chiefs of Staff followed his lead. GEN George S. Patton did not just deploy tanks, for example; he deployed armored divisions with capable leaders and soldiers trained to execute combined armed tactics exploiting all the tools mechanization had made available. Similarly, Army digitization was not a willy-nilly purchase of computers. It was a spiral development of combat-capable networks that substantially altered organization, combat doctrine, expectations of leaders, recruitment, training and the manner in which technologies other than digital were cobbled into the whole. Now we run the risk of becoming drone-centric in our military thinking. This could work as long as our objective is plinking high-value targets and our adversaries are incapable of shooting drones down. If the objectives or the threats become broader, we will want to widen our approach with respect to robots just as we have done in the past with respect to mechanization and digitization.

There Will Be Many Cooks

The last Army leader who jawboned with a small group of confidants and had a reasonable chance of thus redesigning the Army was Secretary of War Elihu Root (1899–1904). Subsequent transformational efforts have involved an ever-widening pool of players, not the least of which included staff agencies Root envisioned. Between

---

***BG John S. Brown**, USA Ret., was chief of military history at the U.S. Army Center of Military History from December 1998 to October 2005. He commanded the 2nd Battalion, 66th Armor, in Iraq and Kuwait during the Gulf War and returned to Kuwait as commander of the 2nd Brigade, 1st Cavalry Division, in 1995. He has a doctorate in history from Indiana University. His book,* Kevlar Legions: The Transformation of the U.S. Army, 1989–2005, *was published in 2011.*

1989 and 2005 the Army Secretariat and Army Staff were larger, more intermingled, and in most ways more empowered than they had ever been before. TRADOC, AMC and U.S. Army Forces Command commanders and their staffs had considerable independent *auctoritas* with respect to transformation, and other four-stars had some. Through the prism of the Joint Staff, the Navy and the Air Force had more influence on Army deliberations than one might think—and vice versa. Contractors and their corporate leaders were more than capable of becoming the tail that wagged the dog. Congressional leaders dabbled intermittently in the Army's internal business, and pundits were more than happy to share their views. Now pundits are assisted by bloggers, who are much quicker to opine and much less likely to be edited.

Library of Congress

Elihu Root, U.S. Secretary of War from 1899–1904

This richness of participation may offer headaches to the incumbent Secretary of the Army and Chief of Staff, but this is not necessarily a bad thing. In *Military Transformation Past and Present: Historic Lessons for the 21st Century,* Mark D. Mandeles convincingly argues that freewheeling "multi-organizational" deliberations are and have been the most fruitful approach when facing the non-routine. The trick is to somehow tap all of this disparate intellectual energy and translate it into a usable product.

GEN Sullivan's modern Louisiana Maneuvers were precisely such an effort. Momentarily setting aside customary wiring diagrams, they canvased broadly for relevant, innovative ideas. Reiterative "stockholder" meetings inched towards refinements. It was not actually decision making, but it was consensus building. Subsequent Chiefs of Staff have launched similar initiatives. Ultimately those empowered to do so must make and market decisions, but their footing seems surer if they have absorbed the debate beforehand.

Analysts Matter

Defense decision making is not entirely rational. Try closing an unwanted domestic base or shutting down an unwanted line of procurement to test this theory. Nevertheless, defense decision making has structured itself to better take rigorous analysis into account. A watershed in that regard was the first Quadrennial Defense Review (QDR), that of 1997. Rather than relying on each service to develop its own arguments and metrics, the Department of Defense stipulated models to be used and directed multiservice analytic drills of its own. The most notable of these were Dynamic Commitment and the Deep Attack Weapons Mix Study (DAWMS). Recognizing what was at stake, Army Chief of Staff GEN Dennis J. Reimer (1995–1999) mustered top drawer Army talent at each level of the deliberations.

Dynamic Commitment was a tiered series of seminars that worked its way through 46 scenarios to achieve a conglomerate appreciation of necessary force structure. Drawing on historical parallels, Army planners established that more than 80 percent of the manpower required would be Army or Marine Corps. DAWMS was widely viewed as an opportunity to redirect funding from the Army to the Air Force. Instead, detailed analyses flagged up the cost effectiveness of helicopter-borne Hellfire missiles and the Army Tactical Missile System II. The Vice Chief of Staff quipped that Army "geeks" had saved two divisions. Subsequent QDRs have similarly demonstrated the value of getting the Army story right in rigorous defense deliberations.

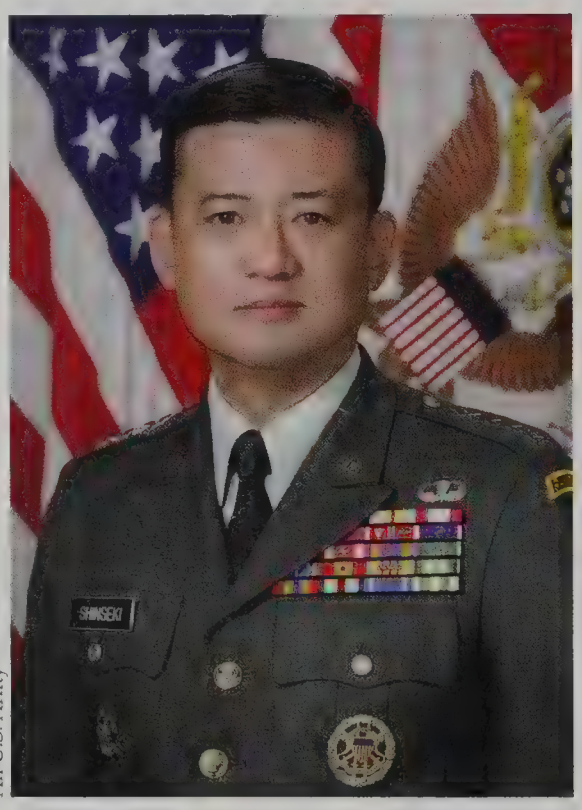
Money Matters

A "vision" without funding is a hallucination. Absent the imperatives of actual or imminent combat, Congress will not have the incentive to fund a general transformation. Advances will be incremental or prototypical. During the lean years between 1991 and 2001, robust tactical unit digitization within the Army topped off at a brigade and a division base. Army tables of distribution and allowances, base infrastructure and the logistical base were further along, but relatively few tactical units could demonstrate what right looked like with respect to the anticipated digital battlefield. Their prototypical example proved sufficient when money flowed in with Iraqi Freedom, however. Army Chief

U.S. Army

GEN Dennis J. Reimer, Army Chief of Staff from 1995–99.

GEN Peter J. Schoomaker (right), Army Chief of Staff from 2003–07, succeeded GEN Eric K. Shinseki (below, left), 1999–2003. GEN Martin E. Dempsey served from April to September 2011 before becoming Chairman of the Joint Chiefs of Staff.



All U.S. Army

of Staff GEN Peter J. Schoomaker (2003–2007) consciously steered money to decisively accelerate the Army-wide transformation that had been years in the making. The Iraqi Freedom invasion force sported 1,200 bolt-on appliqué Blue Force Tracking sets, and that number ballooned past 55,000 in a few years. Units deploying to Iraq were hosed down with new equipment as they joined the queue. The digitized expeditionary army expanded from the prototypical to the pervasive overnight. This explosive pattern, seen in World Wars I and II as well as Iraqi Freedom, seems likely to repeat itself. A primary emphasis during interwar years should be figuring out how best to quickly and effectively spend lots of money when it suddenly becomes available.

The Goalposts Will Change

Our current Chairman of the Joint Chiefs of Staff, GEN Martin E. Dempsey, correctly observes that "conflict picks [illegible] more often than the other way around, and soberly adds that "we will get it wrong again" at times when trying to predict the future. This is largely because our adversaries "get a vote" and are inclined to attack weakness rather than strength. This makes a breadth of preparation and education flexible enough to allow for rapid change imperative. The most recent example of this is provided by Iraqi Freedom. In expeditionary capabilities and in conventional warfare, our Army's performance markedly exceeded even the notably superb performance of Desert Storm. The pivot to unconventional warfare proved difficult, although too many pundits attribute this primarily to failures of conceptualization and preparation rather than to the mathematics of troops on the ground versus expectations of them. Army Chief of Staff GEN Eric K. Shinseki (1999–2003) is the most noted of a fistful of professional soldiers who argued for appropriate numbers of "boots on the ground" were we to occupy Iraq. In Chapter 9 of *Kevlar Legions*, I argue that the Army adapted well and performed capably—albeit not flawlessly—against trying circumstances and long odds in Iraq. One tangible example of its adaptability is provided by the anti-IED campaign. Despite a quadrupling of such attacks and rapidly accelerating insurgent sophistication with respect to them, American casualties went down. That said, however one assesses Army performance in Iraq and Afghanistan, there remains a need for broad preparation and ingrained adaptability when preparing for an uncertain future.

Defense transformation is and should be a timely topic. Budget cuts planned or prospective deepen the sense of urgency. Hopefully those in the saddle now will borrow from those who have gone before. If they do, admonitions to balance current and future readiness, consider technology but one of a half-dozen imperatives, accommodate numerous cooks, muster capable analysts, plot realistic funding and consciously ingrain adaptability may be worthy of their consideration. Make the past serve the present. ★

Recommended Reading:

Brown, John S., *Kevlar Legions: The Transformation of the U.S. Army 1989–2005* (Washington, D.C.: Center of Military History, 2011)

Freedberg, Sydney J. Jr., "The Next War," *Government Executive*, August 15, 2012, 10–17.

Mandeles, Mark D., *Military Transformation Past and Present: Historic Lessons for the 21st Century* (Westport, Conn.: Praeger Security International, 2007)

Setting the Azimuth for Joint Force 2020:

Globally Integrated Operations And Mission Command

U.S. Army /SFC Mark Bell

By Dennis Steele
Senior Staff Writer

We have to recognize that "about 80 percent of the [joint] force of 2020 already exists," Chairman of the Joint Chiefs of Staff GEN Martin E. Dempsey told the audience at AUSA's inaugural GEN Bernard W. Rogers Strategic Issues Forum in late September. That part, he noted, has already been set to a significant degree by previous and ongoing budget cycles and programming already in place.

"It's that other 20 percent that I really want to focus our attention on," he added. "If we can get that 20 percent to be a dramatic enough difference and allow it then to wash back over the other 80 percent, then the whole force becomes a little bit better."

GEN Dempsey is the point man for setting the parameters that will shape Joint Force 2020—the direction that the services will take to counter evolving security threats, align with national strategic direction and reset for the future after more than a decade of war in Southwest Asia.

To meet the growing complexities of defense threats, GEN Dempsey has advocated integration of joint command and control frameworks and specialized assets and creation of a joint operating environment that is inherently flexible at its core. With the ability to assemble necessary assets rapidly, it is envisioned to meet specific threats and disassemble assets just as quickly to be ready for the next threat, with all echelons trained and confident to operate jointly under the tenets of Mission Command.

At the Rogers Forum, GEN Dempsey said that during the first 25 years of his service the fundamental concept was to build the U.S. Armed Services as a force of mass and "disaggregate" it as it became necessary.

"I think probably what you will see in the future is that we will build the force intending to be able to disaggregate it and mass it only as necessary," he said. "It is almost a reversal of the paradigm with which I grew up."

He added that smaller Army unit deployments could be routine in the future, explaining that the Army has already gone from division-centric deployments to deployment of

Dennis Steele

Chairman of the Joint Chiefs of Staff GEN Martin E. Dempsey speaks at the inaugural GEN Bernard W. Rogers Strategic Issues Forum, sponsored by AUSA's Institute of Land Warfare.

individual brigade combat teams and that deployments in the future could be centered on lower-unit echelons or task forces.

GEN Dempsey's talk at the Rogers Forum preceded by a few days the public release of *Capstone Concept for Joint Operations: Joint Force 2020*, an overarching document prepared under the Chairman's direction that is designed to get the military thinking about measures necessary to address envisioned future paradigms.

GEN Dempsey wrote in the document's foreword: "New concepts of operation are needed to address the security paradox we face. This Capstone Concept is one of the first to imagine what they might be. It proposes an approach called *globally integrated operations*. In this concept, Joint Force elements, globally postured, combine quickly with each other and mission partners to integrate capabilities fluidly across domains, echelons, geographic boundaries, and organizational affiliations. While much about this approach remains to be developed, it aims to leverage the distinct advantages our military holds over adversaries so that U.S. Joint Forces, in concert with the other elements of national power, keep America immune from coercion."

The document's introduction states:

> This *Capstone Concept for Joint Operations* (CCJO) describes potential operational concepts through which the Joint Force of 2020 will defend the nation against a wide range of security challenges. Its purpose is to guide force development toward Joint Force 2020, the force called for by the new defense strategic guidance, *Sustaining U.S. Global Leadership: Priorities for 21st Century Defense.*
>
> A capstone concept by definition articulates a high-order vision of how the future force will operate. It cannot by itself provide the detailed guidance necessary to realize the Joint Force of 2020. It can, however, describe the future operating environment, advance new concepts for joint operations, and suggest attributes that will define the future force. In this way, the CCJO aims to establish a bridge from the new strategic guidance to subordinate concepts, force development guidance, and follow-on doctrine.
>
> This CCJO focuses on what is new and different in the future strategic environment. It builds on prior capstone concepts, but also recognizes that much of the nature of conflict in the world is enduring. War remains a clash between hostile, independent, and irreconcilable wills each trying to dominate the other through violence. Enemies will continue to search for, find, and exploit U.S. vulnerabilities. Even when waged with increasingly sophisticated technologies, the conduct of military operations remains a fundamentally human enterprise. Finally, this concept recognizes that military force is only one element of national power. In many cases strategic success will turn on our ability to operate in concert with the rest of the U.S. government, allied governments and their armed forces, and nongovernmental partners.

The CCJO identifies 10 primary mission areas under the current national security strategy that the Joint Force must undertake to protect U.S. national interests:

- Counter terrorism and irregular warfare.
- Deter and defeat aggression.
- Project power despite anti-access/area denial challenges.
- Counter weapons of mass destruction.
- Operate effectively in cyberspace and space.
- Maintain a safe, secure and effective nuclear deterrent.
- Defend the homeland and provide support to civil authorities.
- Provide a stabilizing presence.
- Conduct stability and counterinsurgency operations.
- Conduct humanitarian, disaster relief and other operations.

Concerning the essential element of the Capstone Concept strategy called globally integrated operations, the document states:

> *Globally integrated operations* is the concept for how the Joint Force should prepare for the security environment we will soon face. It requires a globally postured Joint Force to quickly combine capabilities with itself and mission partners across domains, echelons, geographic boundaries, and organizational affiliations. These networks of forces and partners will form, evolve, dissolve, and reform in different arrangements in time and space with significantly greater fluidity than today's Joint Force.
>
> The strength of our Joint Force has always been its ability to combine unique Service capabilities to project decisive military force. The concept of globally integrated operations aims to accelerate and expand how the Joint Force musters decisive force. At its heart, the concept envisions the integration of emerging capabilities—particularly special operations forces, cyber, and intelligence, surveillance and reconnaissance (ISR)—with new ways of fighting and partnering. Together, this will achieve higher levels of military effectiveness against the threats we will most likely face.

The CCJO goes on to identify significant elements of globally integrated operations, citing the primary requirement to be "a commitment to the use of mission command."

The Rogers Strategic Issues Forum

AUSA's Institute of Land Warfare's Rogers Strategic Issues Forum, which grew out of AUSA's recognition of the need to expand its outreach efforts in telling the Army story and in further emphasizing the vital strategic importance of landpower, provides speaking opportunities for senior leaders in the uniformed services, the Department of State, academia and think tanks. The lectures will be tailored to address critical issues affecting land forces and strategy.

The forum was named in honor of GEN Bernard W. Rogers, the 28th Chief of Staff of the Army (CSA). Following his tour as CSA, GEN Rogers was named Supreme Allied Commander Europe; he served in that position for eight years until his retirement from active service in 1987.

The second event in the series is scheduled for December 3. The featured speaker will be GEN Carter F. Ham, Commander, U.S. Africa Command.

GEN Bernard W. Rogers

It states:

> Mission command is the most appropriate command philosophy for the increasingly uncertain future environment because it empowers individuals to exercise judgment in how they carry out their assigned tasks. First and foremost, it exploits the human element in joint operations, emphasizing trust, force of will, intuitive judgment, and creativity, among other traits. This ethic of decentralization empowers subordinate leaders to advance their commander's intent through the most effective means at their disposal. A new generation of digital collaboration technology enables us to realize mission command in even more powerful ways. Mobile devices with reach-back to network-based services will allow distributed commanders and staffs to collaborate as though co-located. Developing networks that can simultaneously integrate secure and non-secure communications will widen the circle of actors who can support a given operation, allowing diverse stakeholders to contribute insights and expertise in real time. Future mission command will thus be highly collaborative as seniors and subordinates join in a circle of feedback, initiative, adaptation, and mission effectiveness.

The CCJO emphasizes that military education is the avenue to achieve Mission Command in joint operations, stating: "Each of the Services implements some version of Mission Command in the conduct of joint operations, but differences exist owing to characteristic missions and primary operating domains. Ensuring the principles of mission command in play at the Service level can function together in joint operations requires a common understanding of its varying manifestations and how they might be harmonized. A renewed focus on the command environment in Joint Professional Military Education is therefore critical. Mission Command must be further understood in the context of the modern information environment, including advancements in command and control technologies and their vulnerabilities. Educating commanders and staffs to match command philosophy to the particular requirements of each mission is also important, as is imbuing commanders with restraint as communication technologies could increase the propensity for micromanagement."

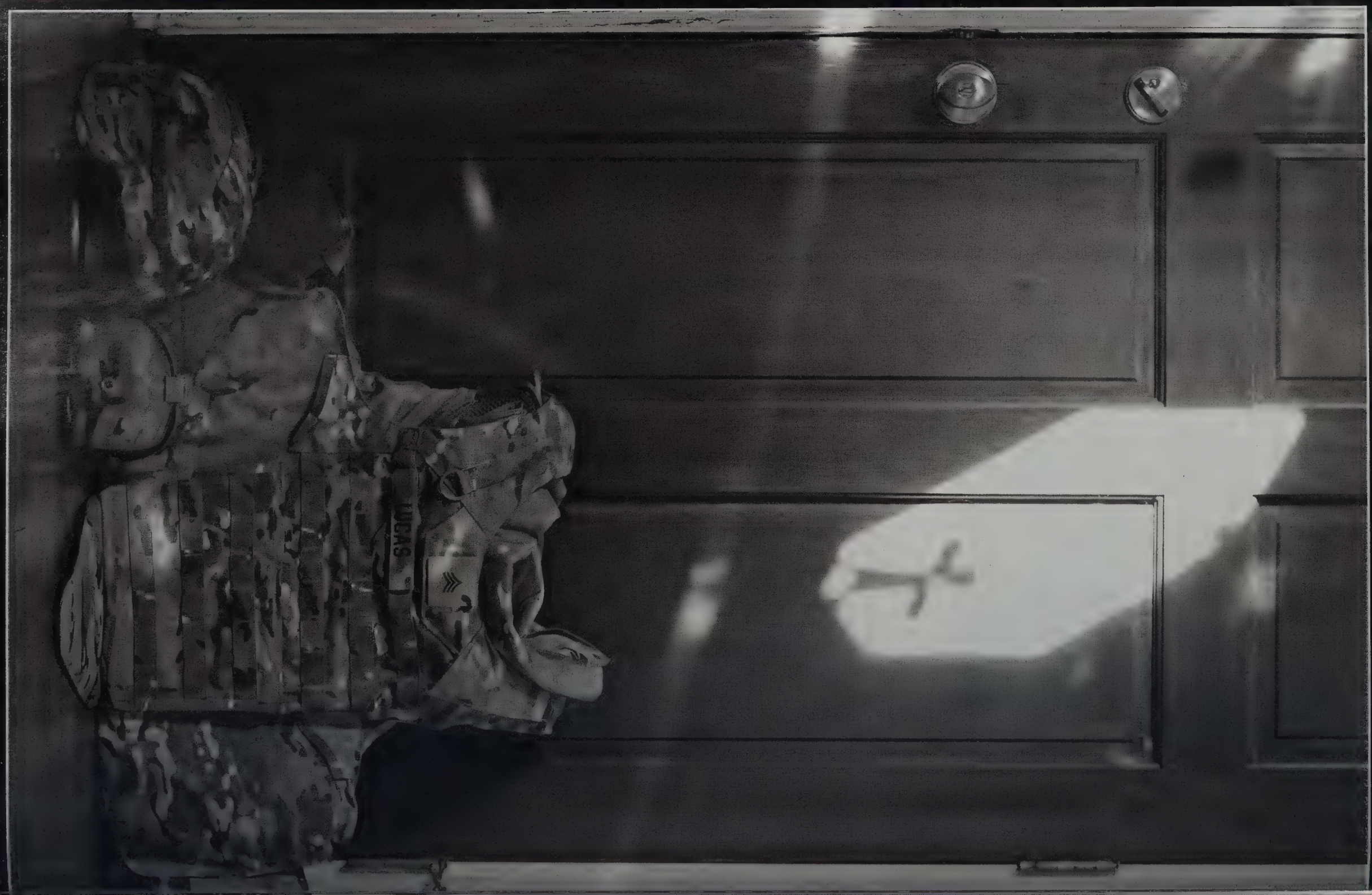
The CCJO's conclusion again refers to globally integrated operations and Mission Command, stating:

> The strength of any Joint Force has always been the combining of unique Service capabilities into a coherent operational whole. Future Joint Forces will routinely employ more such combinations than ever before, with partners as well as within the Joint Force, to achieve efficiencies and synergies not previously feasible. The assertion is that through globally integrated operations, Joint Forces will remain able to protect U.S. national interests despite constrained resources.
>
> Globally integrated operations rely on mission command to provide the adaptability and tempo essential to future operations. It must provide the ability to seize, retain and exploit the initiative in time and across domains. It is predicated on significant global agility so forces can aggregate, reconfigure, and disaggregate fluidly as required. It leverages the participation of partners. It presents more flexible options for establishing Joint Forces and enables cross-domain synergy at increasingly lower echelons. It plans for cyberspace, space, special operations, global strike, and global intelligence, surveillance and reconnaissance capabilities to play more pronounced roles in future joint operations. Finally, it helps future joint operations be increasingly discriminate to minimize unintended consequences.

The capstone document addresses many aspects related to joint force development in detail, including an outline of evolving threats and potential roadblocks to implementation.

The complete version of the *Capstone Concept for Joint Operations: Joint Force 2020* can be downloaded from the Joint Chiefs of Staff website through a shortened web address: http://goo.gl/bc9VU. ★

2012 Photo Contest Winners



First Prize

Ashley Lucas, "The Perfect Promise"
Raleigh, N.C.

Just before my brother left for his first deployment in September 2011, I was sitting alone on the couch while he said goodbye to some family members on the phone. I looked towards his gear leaning on the inside of the front door, and noticed that the crystal cross given to my brother and his wife on their wedding day 11 months before had been caught in the sunlight from the window. I grabbed my camera and snapped an image of the perfect promise. This photo has given me and my family a lot of hope this year. It makes the tough days a little easier.

Second Prize

CW3 Daniel Layman, "On the Go"
Killeen, Texas

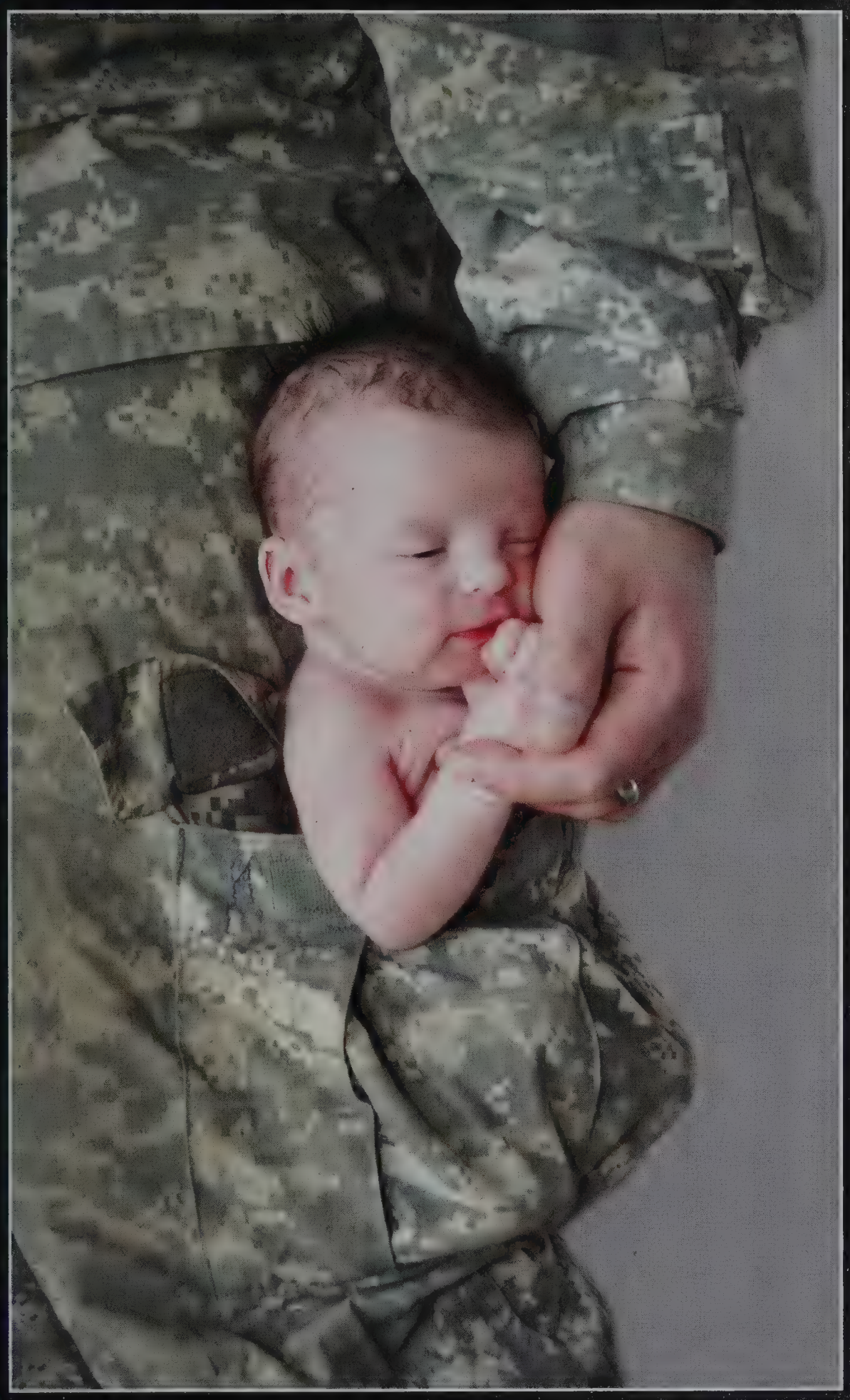
A UH-60 from Task Force Lobos 2-227 Aviation Regiment lifts off from an air assault pickup zone in Regional Command-North, Afghanistan.

Second Prize

SGT Daniel J. Schroeder
Wahiawa, Hawaii

SGT Leslie Mosley, a door gunner assigned to Company B, 1st Battalion, 111th Aviation Regiment, attached to 3rd Battalion, 25th Combat Aviation Brigade, keeps a watchful eye out the side window of a CH-47 Chinook during a mission in Afghanistan.

Third Prize



Corina Myers, "Daddy's Always By My Side"
Frankfort, Ind.

Aubree, a week-old baby, by her father's side.

Third Prize

Melissa Helmick, "Welcome Home"
Reston, Va.

A "Welcome Home" celebration for all Vietnam Veterans, which they so richly deserved. From left to right: Mary Meinhardt; COL Harry Meinhardt, USA Ret.; AnnMarie Kerfoot.

Honorable Mentions

SSG Jeremy Layman, "No Kids Allowed"
Scammon, Kan.

SSG Carlos Turcious of 4-6 Cavalry (Kansas Agribusiness Development Team) closes the gate to the research and development farm just outside Forward Operating Base Mehtar Lam, Laghman, Afghanistan, in November 2011.

Walter E. Ross III, "These Colors Don't Run"
Biloxi, Miss.

Family Day at Fort Jackson, S.C., on March 28, 2012.

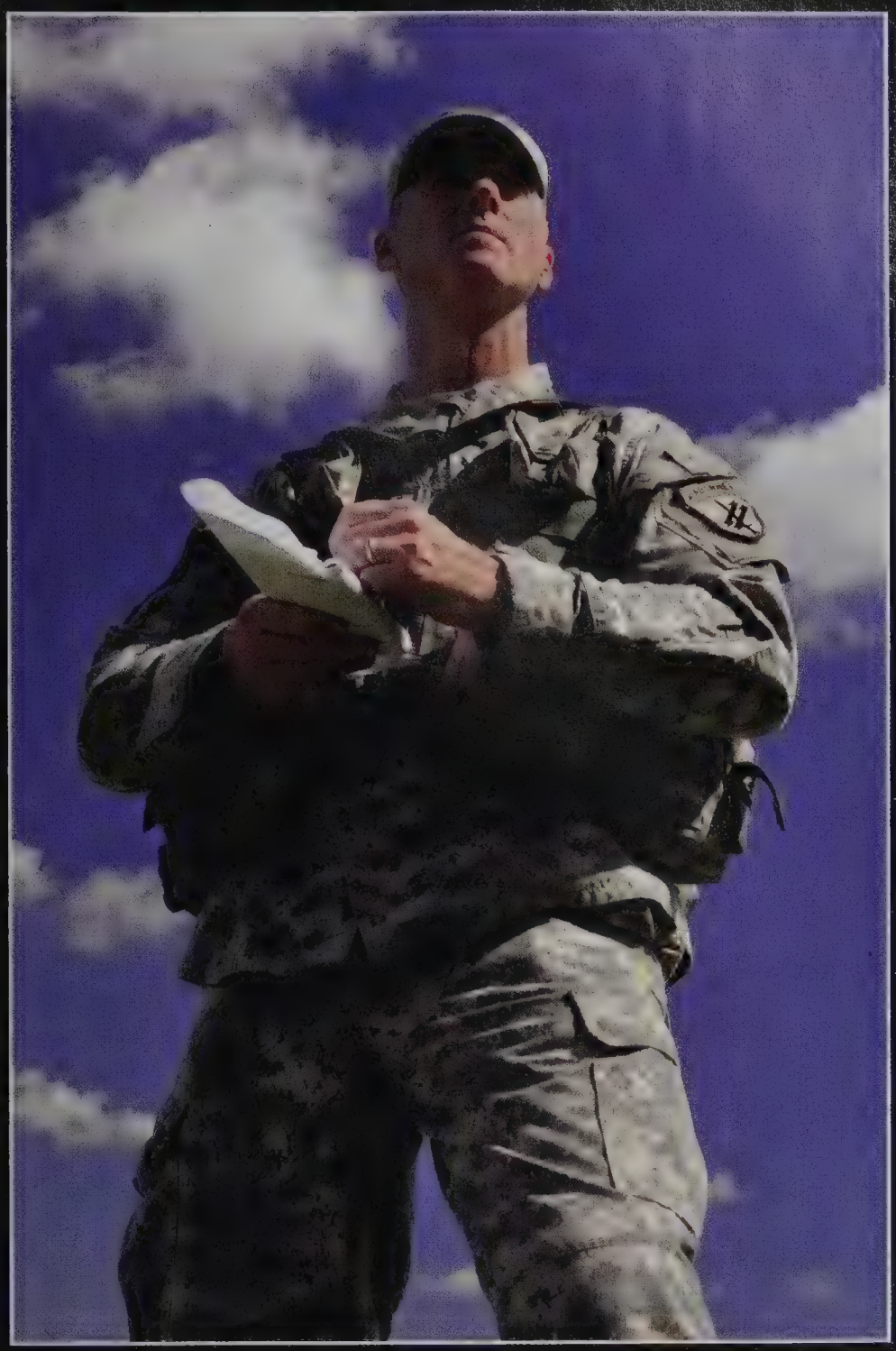
Honorable Mentions

Janis Miller, "Honoring Our Fallen Veterans" West Point, N.Y.

I took this photo at West Point Cemetery on May 24, 2012. My husband, COL Daniel Miller, and my eight-year-old son, Aidan Miller, honor our fallen veterans by placing flags on the graves for Memorial Day. This is a way for us to show our children that Memorial Day is not just about barbecues; it is a reminder that we must continue to honor the fallen.

Doug Dempsey, "Top Priority"
Centerton, Ark.

1SG Timothy Rogers of the 362nd Tactical Psychological Operations (PSYOPs) Company conducts checks on training during a 10th PSYOPs Battalion Field Training Exercise.



COL Lou Carmona, "New Dawn"
Rancho Murieta, Calif.

This photo was taken on a Team One mission that flew the ring routes (PAX Hauls) over Baghdad as part of the 40th Combat Aviation Brigade. Team One was a normal mission set (flight of two UH-60s) flown by Company A, 1-185th. As the pilot/photographer in the sister ship, I took this shot as the sun was rising on the first leg from Taji to Baghdad on October 5, 2011.

Father Emil

Above, CPT Emil Kapaun (center, left), who served as a chaplain during World War II and the Korean War, helps a wounded soldier off a Korean battlefield. Right, Father Kapaun uses the hood of his jeep as an altar as he conducts a field Mass west of Taegu, Korea. Opposite top, after enemy fire damaged his jeep, CPT Kapaun rode an abandoned bicycle to visit the frontline units. Opposite bottom, Father Kapaun joined the Army in 1944.

Kapaun

By LTC William C. Latham Jr.
U.S. Army retired

Ray Skeehan/Courtesy Photo

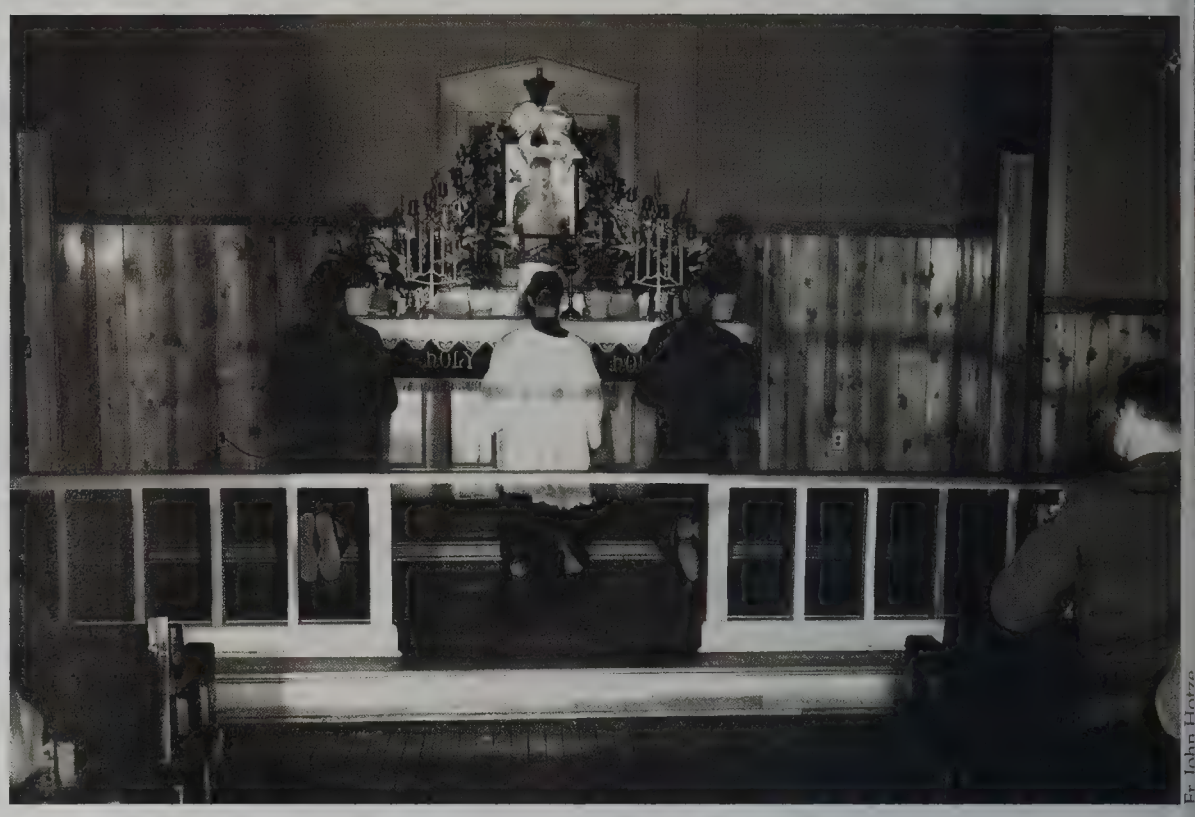
Family Photo

On the night of November 2, 1950, U.S. Army chaplain CPT Emil Kapaun huddled in a dark, cold dugout near the Korean village of Unsan, surrounded by Chinese communist soldiers. Two days earlier, the dugout had been a command post for the 3rd Battalion, 8th Cavalry Regiment, 1st Cavalry Division, but Chinese communists had overrun the battalion on the night of November 1, and most of the survivors had withdrawn inside a small perimeter. The dugout lay in no-man's-land outside the American lines, but Kapaun ignored the danger to care for the men who had sought shelter. Chinese infantry had already killed several Americans defending the dugout, and now the enemy soldiers crept closer, preparing for a final assault on the unguarded position.

Fortunately, a wounded Chinese officer in the dugout spoke English. Kapaun persuaded the man to call out to his comrades and negotiate a surrender. Instead of slaughtering the wounded, the Chinese evacuated Kapaun and 15 other walking wounded. Emerging from the hole, the prisoners saw American and Chinese corpses strewn across the moonlit cornfield. Marching away under armed guard, Kapaun saw a wounded GI lying in a ditch with a Chinese soldier standing over him preparing to shoot. Instinctively, Kapaun moved towards the enemy soldier, pushed him aside and lifted SSG Herbert Miller to his feet. Six decades later, Miller still remembers the puzzled look on the Chinese soldier's face. "He didn't know what to do," recalled Miller. "Father Kapaun had that effect on those guys."

Emil Kapaun was born on April 20, 1916, in Pilsen, Kan., a tiny farming town on the edge of the Great Plains. Life on the farm endowed Kapaun with a rugged physical endurance that would serve him well in captivity, while his Catholic upbringing provided a deep-seated faith that no amount of suffering or ideological pressure could shake. At the age of 14, Kapaun left Pilsen to attend a Catholic boarding school. After graduation in 1932, he entered a seminary in Saint Louis, Mo. In 1940, the diocese of Wichita ordained him as a priest and assigned him as the assistant pastor in Pilsen.

The outbreak of World War II provided the energetic young priest with another outlet. He vol-



Soldiers serve as acolytes as Father Kapaun conducts a service. He landed at Pohang, Korea, in late June 1950 with the 8th Cavalry Regiment.

Fr. John Hotze

unteered to spend his days off ministering to Catholics at a nearby military base, and he soon developed a desire to become a military chaplain. Kapaun's bishop in Wichita denied several requests before finally permitting him to join the Army in 1944. Having completed training at Fort Devens, Mass., the young priest shipped out to India, where he served two years along the malaria-ridden border with Burma.

Kapaun came home and received his discharge in 1946. He earned a graduate degree at The Catholic University of America and served in various pastoral roles in the Wichita diocese. He missed the challenges of military life, however, and felt that he could best serve the Lord by resuming his role as a military chaplain. His bishop reluctantly agreed, and Kapaun rejoined the Army in 1948, briefly serving at Fort Bliss, Texas, before shipping out for Japan in early 1950.

In January, Kapaun arrived in Tokyo and joined the 8th Cavalry Regiment. After the North Koreans invaded South Korea on June 25, 1950, Kapaun and the 8th Cavalry Regiment landed at Pohang as part of the first wave of American reinforcements. Upon landing, the regiment's two battalions moved northwest to establish blocking positions near Yongdong, and they fought their first action against enemy forces on July 23rd.

As the men of the 8th Cavalry fought and died in the nameless Korean mountains and rice paddies, Kapaun seemed always to be in the line of fire, helping with the wounded and sharing apples and encouragement with the men in the foxholes. For one particularly fearless mission, Kapaun earned a Bronze Star for rescuing a wounded soldier in the midst of a firefight.

The chaplain acknowledged the horrors of war. One letter to friends at home painted a gruesome picture of the carnage: "I have seen soldiers with both legs blown off; one had the top of his head completely blown off. He never knew what hit him." In another letter, Kapaun confessed: "I have been on the front lines for eight days. We were machine-gunned, hit by mortars and tanks. Three times we escaped with our lives . … God has been good to me. Others have not been so fortunate. A fellow can stand only so much."

Despite his private feelings, Kapaun maintained a brave front among his fellow soldiers. On one occasion, a North Korean tank round missed his head by a few feet, and the resulting blast knocked off his helmet. On another occasion, an artillery barrage landed within 150 yards of where Kapaun was holding an open-air mass. Nobody was hurt, and the mass continued. When enemy fire damaged Kapaun's jeep, he found an abandoned bicycle on which he visited the frontline units.

Like his fellow soldiers, Kapaun spent weeks sleeping on rocky ground, enduring swarms of mosquitoes and suffering from diarrhea, but he maintained a cheerful endurance that proved contagious. SGT Bill Richardson first met him one morning after surviving a series of enemy night attacks. Surrounded by enemy corpses, the sergeant and his men were understandably edgy. According to Richardson, however, Kapaun carried himself with a serene confidence and good cheer. "It was not long," Richardson wrote, "before he had us all smiling."

On October 26, a South Korean division ran into stiff enemy resistance near the hamlet of Unsan. Interrogating prisoners after the first day's fighting, the South Korean commander discovered an even greater surprise: The enemy forces were not North Korean remnants but three divisions of well-organized communist Chinese. Having already predicted that Chinese forces would not dare intervene in Korea, higher headquarters dismissed the report.

Still, the South Koreans had clearly encountered significant resistance, and the I Corps commander dispatched American reinforcements. Within a few days, soldiers of the 8th Cavalry Regiment arrived at Unsan and began digging in north and west of the village. The weather was unseasonably warm, but clouds of black smoke drifted over the valley, thanks to fires set by the Chinese to conceal their movements. The Americans soon discovered clues suggesting the possibility of a trap. LT Bob Wood, for example, reported hearing Chinese conversations on his platoon radio, but

---

***LTC William C. Latham Jr.**, USA Ret., is the author of* Cold Days in Hell: American POWs in Korea, *to be published by Texas A&M University Press in 2013. He served 22 years on active duty as an Army aviator and currently teaches sustainment and force management at the U.S. Army Command and General Staff College.*

In Korea, CPT Kapaun "seemed always to be in the line of fire." On November 2, 1950, he dragged numerous wounded soldiers to safety until captured by the Chinese near Unsan.

these warnings were ignored. The South Koreans had withdrawn, and the nearest American unit was located 10 miles south. The 8th Cavalry was "out on a limb," according to their division commander.

For once, Emil Kapaun was not located on the front lines, having agreed with another chaplain to exchange assignments for a couple of days. At Unsan, Kapaun and his assistant, PFC Patrick Schuler, had pitched their tent in a plowed field located a few hundred meters south of the village, where the regiment's 3rd Battalion established its position as the regimental reserve. Three of the battalion's four rifle companies were spread out along low ground around the field—poor terrain if the enemy mounted a determined attack. Assuming that any opposition would come from North Korean stragglers, most leaders in the battalion expected little or no contact.

November 1 is All Saints' Day on the Catholic calendar, and it meant a busy day for the 8th Cavalry Regiment's only Catholic chaplain. Kapaun and Schuler rose early, and the priest moved about the perimeter, saying masses, hearing confessions and visiting with the troops. Throughout the day, 8th Cavalry patrols encountered indications of a strong enemy presence, but nobody in authority took the time to piece together this evidence.

Shortly after dusk, the Chinese showed their hand, launching a heavy rocket barrage against the regiment's 1st Battalion north of Unsan. Soon another wave of Chinese slammed into the 2nd Battalion's positions northwest of town. With the regiment's position in danger of collapse, higher headquarters finally directed the 8th Cavalry to withdraw south.

Like most of the men in the 3rd Battalion perimeter, Kapaun had no inkling of the fierce battle raging north of the village. He and Schuler had gone to bed early that evening but were roused at 2300 hours and prepared their vehicle to move out. Shortly after midnight, the two drove their jeep east to join the column of retreating 8th Cavalry vehicles, but Chinese ambushed the convoy. Kapaun and Schuler retrieved as many wounded Americans as they could.

Meanwhile, the 3rd Battalion was preparing its own withdrawal, with support vehicles lining up near the battalion command post. At 0300 hours on November 2, enemy troops struck the 3rd Battalion's positions. Infiltrators made their way to the battalion command post, and skirmishes erupted in and around the vehicles. Separated from Kapaun in the confusion, Schuler eventually escaped to the south. Kapaun darted around the battlefield, dragging wounded soldiers to safety. At one point during the melee, Chinese soldiers captured him. An American soldier saw the priest being hustled away from the fight and shouted, "There goes the chaplain!" Several Americans turned their fire on the Chinese, and Kapaun escaped.

Fighting continued until dawn. Kapaun helped the battalion surgeon, Dr. Clarence Anderson, establish an impromptu aid station in an abandoned dugout near the main road. Other Americans manned hasty defensive positions around three tanks that had been attached to the battalion. The firepower from the tanks helped the Americans drive off the Chinese attackers.

Surrounded by the Chinese, several hundred survivors formed a small defensive work around the three American tanks. The dugout full of wounded Americans lay well outside the perimeter, but American aircraft kept the enemy at a distance. All through the day, Kapaun repeatedly dashed into no-man's-land to drag wounded soldiers to the dugout's relative safety, while Chinese snipers and mortar crews tried to kill him. The fearless priest saved 15 soldiers that day and would later receive the Distinguished Service Cross for his heroism.

That night, the Chinese captured Kapaun and several other prisoners, including SGT Herbert Miller, whom Kapaun had saved from execution. The prisoners moved east away from the battlefield and were eventually confined in a barn, where they could hear American planes flying overhead. After several days, the small group began moving north, travelling on foot and occasionally by truck. A few miles north, Kapaun's group was reunited with several hundred prisoners captured at Unsan, including Dr. Anderson, who had stayed with the wounded in the dugout.

Having heard rumors and seen proof of North Korean brutality, many American prisoners expected to be shot. Instead, the Chinese treated them cordially, promising warm barracks and plenty of food and medical attention. The large group of prisoners spent most of November marching north to the Yalu River, eventually reaching the town of Pyoktong. Shortly after their arrival, however, an American air strike destroyed half of the town. The prisoners turned back south, marching along icy trails to a remote valley and the village of

Sombakol, where they would spend the next two months.

The group included several men on stretchers, and getting volunteers to carry these men grew increasingly difficult as time passed. Kapaun led by example, never missing a turn at the end of a stretcher and loudly encouraging those around him to pitch in and do their share. En route, Kapaun received word that a colleague, Chaplain Kenneth Hyslop, was in danger. Wounded at Unsan, Hyslop could no longer keep pace with the column of prisoners, and his injuries made him incapable of eating. Kapaun located his weakened comrade in the darkness and sat with him through the long night, as Hyslop lapsed into a coma and eventually perished. Kapaun saw to it that his colleague was buried with dignity.

The Americans soon discovered that earlier Chinese promises of warm barracks, medical care and plenty of food were, at best, overly optimistic. The prisoners received no blankets, no medicine and meager rations. Both on the march and after they reached Sombakol, prisoners subsisted on about 500 grams of food per day, usually in the form of millet, cracked corn or soy beans.

Kapaun and several other officers quickly realized that their survival depended on their ability to steal extra food from their captors. The priest concluded that the commandment against theft did not apply to men in such desperate straits and began venturing forth each night in search of food. He began returning with corn, garlic, peppers, salt and, on one occasion, a hundred-pound sack of potatoes.

Kapaun also began sneaking down to the enlisted huts. Many Sombakol prisoners were soldiers of the 8th Cavalry captured at Unsan, and they welcomed their chaplain's visits. Praying with some and joking with others, the priest did more than simply cheer up the young prisoners. He also provided desperately needed hope amid desolate conditions.

At the end of eight weeks, the American prisoners left Sombakol. Although some Americans had died in the valley, many of them due to battlefield wounds, these losses proved a fraction of the casualties suffered by American prisoners at other temporary camps that winter. By word and deed, Emil Kapaun had given his fellow prisoners an invaluable gift—the will to survive.

In mid-January, the Sombakol prisoners marched back to Pyoktong, where they found conditions worse than those they had left in the valley. Rumors of imminent rescue had helped keep spirits high at Sombakol, but those hopes now faded. Meanwhile, winter had arrived in full and deadly force along the banks of the Yalu, with temperatures dipping well below zero. Finally, Pyoktong soon grew dangerously overcrowded, as the Chinese herded more and more prisoners into the squalid quarters.

Kapaun persisted in his ministry at the new camp. During the day, he assisted American medical personnel at the camp hospital, feeding and bathing those men too weak to care for themselves. Many soldiers in the hospital lay in their own feces, unable to stagger to the latrines. Kapaun gently removed their soiled clothes, bathed them in hot water and dressed them again. At night, he sneaked past guards to visit the enlisted huts, sharing news and encouragement and saying a brief prayer during each visit. He also continued to steal various necessities from the Chinese, including food, tobacco and even firewood, all of which he would share with the other prisoners during his visits.

On Easter Sunday, Kapaun openly defied communist ideology—which renounced religious faith—by celebrating an ecumenical sunrise service in the ruins of a burned-out church. Holding a makeshift crucifix, Kapaun wore his priest's stole, the purple ribbon signifying his pastoral office, and recited the Stations of the Cross. Most of the men in the officers' compound attended, including Catholics, Protestants, Jews and atheists. While Chinese guards watched nervously, Kapaun ended the service by leading the men in song. "America the Beautiful" echoed from the surrounding mountains, still blanketed by snow. The officers sang at the top of their lungs, hoping the music would reach the other prisoners at Pyoktong.

By now, Kapaun was visibly weakening due to various physical ailments that had accumulated during his five months in captivity. He had developed frostbite during his first weeks of captivity. At the valley, a chip struck his eye while he was chopping wood, forcing him to wear an eye

Fr. John Hotze

Camp # 5, on the Yalu River, was one of several holding sites near Pyoktong, North Korea, where Father Kapaun was taken. He ministered to the other prisoners there until his death in May.

patch for several weeks. At Pyoktong, he developed beriberi. Finally, like most of his fellow prisoners, Kapaun had lost a great deal of weight. His hair was long and scraggly, and he had grown a thick, reddish-brown beard. Unaware of his growing frailty, soldiers teased Kapaun about his increasing resemblance to Christ, and the normally outgoing priest would turn away in embarrassment.

The week after his Easter Sunday service, Kapaun fainted in the midst of a sermon. American doctors discovered a blood clot in his leg, and they insisted that he rest and recover. Fellow prisoners gave Kapaun their medicine and extra food, carried him to the latrine, warmed bricks to help his swelling, and jerry-rigged a trapeze to support his leg. The special attention annoyed him, but after a couple of weeks, Kapaun seemed to recover his old vigor, regaining his mobility with the help of a makeshift cane.

Kapaun's dignified objections to Chinese propaganda, meanwhile, had made him a threat to the Chinese reeducation effort. Kapaun was the only chaplain at Pyoktong, and camp officials seemed to fear his spiritual faith and his enormous influence among both the officers and the enlisted men. In late April, the Chinese summoned Kapaun and accused him of undermining camp discipline and slandering the Chinese Communist Forces. Their threats and accusations, however, had no effect on the priest, and the frustrated officials finally released him, perhaps fearing that any physical abuse would spark a riot.

Family Photo

Chaplain (CPT) Emil Kapaun was awarded the Distinguished Service Cross for his courageous actions during the battle of Unsan.

In early May, the chaplain had recovered enough strength to move about the officers' compound on a pair of crutches. Shortly thereafter he was stricken by a severe case of diarrhea, for which the American doctors had insufficient medicine. Prison officials refused to issue any extra medicine to treat Kapaun, whose quiet opposition to their indoctrination had already branded him a reactionary. Sid Esensten and several other officers solved this problem by fabricating an epidemic in the officers' compound. Dozens of men reported to the Chinese medical team with complaints of diarrhea, and each received a small dose of medicine to treat the problem. The officers collected the medicine and provided it to Kapaun, whose diarrhea subsided after six days. A few days later, however, the priest collapsed in pain and sent for help. His friends found him slumped on the floor of his hut, breathing heavily.

One of the Chinese political officers stumbled on the scene and announced that Kapaun would be transferred to the Chinese hospital in Pyoktong, a half-mile away from the officers' compound. The prisoners knew that this facility was a hospital in name only. No visitors were allowed, and patients lay on the dirt floor in their own excrement, unfed and unattended, while maggots and lice multiplied on their bodies. Many victims did not survive the night in this building, which prisoners dubbed the dying place. Burial parties evacuated corpses each morning. The officers protested bitterly, to no avail. The Chinese officer left to summon reinforcements.

Knowing that time was short, Kapaun spent his final minutes in quiet conversation with his friends, bravely reassuring them. The company of his friends seemed to revive him. Though still in pain, he sat upright and made a few wisecracks, but a squad of armed guards soon arrived with a makeshift stretcher. Again, the prisoners argued loudly, and the American doctors assured the officer in charge that they could cure Kapaun with the right medicine. The officer refused to listen, finally barking, "He goes! He goes!"

Kapaun's fellow prisoners gently lifted the gaunt chaplain onto the litter, and six of his friends carried him out of the officers' compound, escorted by the Chinese. The other officers fought back tears. Clutching his purple stole and his ciborium, Kapaun smiled and waved goodbye. He begged his friend, Mike Dowe, not to take it so hard: "I'm going where I've always wanted to go, and when I get up there, I'll say a prayer for all of you."

When the procession reached the hospital, Chinese guards placed Kapaun by himself in an unlit room, with a small bowl of food by the door, out of his reach. A Chinese doctor looked in periodically but made no effort to help the dying man. A fellow patient, Jack Stegall, sneaked into Kapaun's room, but the priest was too weak to answer Stegall's greeting or eat the meager rations. Kapaun survived for two days before he finally perished.

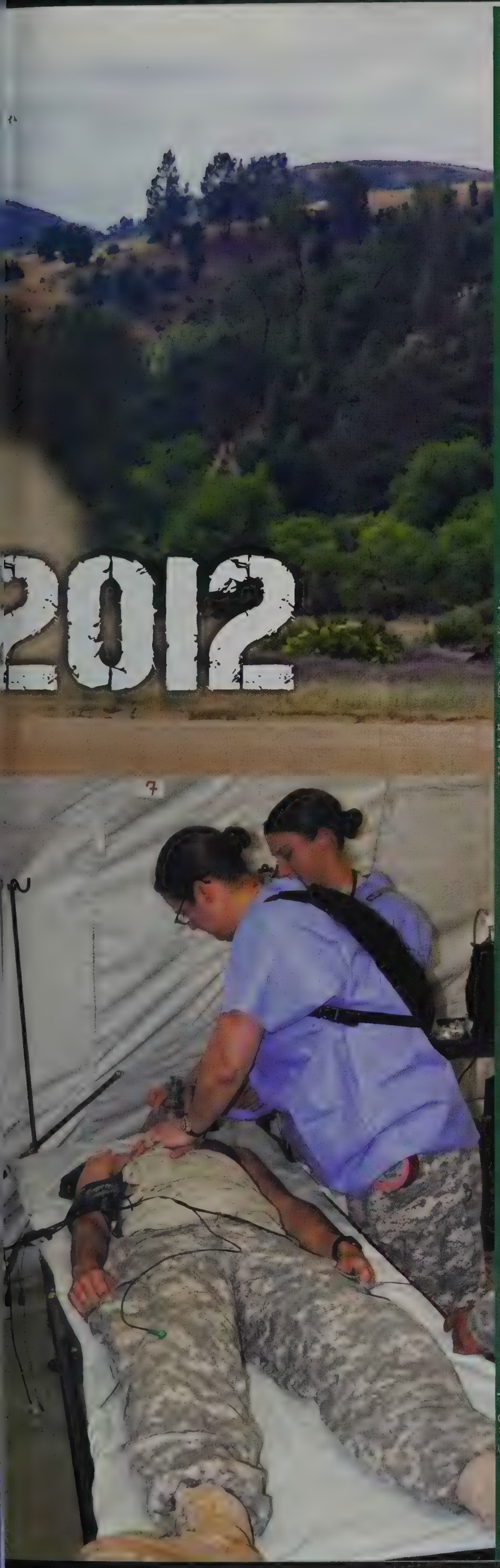
In 1951, the United States Army awarded Kapaun the Distinguished Service Cross in recognition of his courageous actions during the battle of Unsan. He has been nominated for the Medal of Honor on several occasions, most recently in 2000, when U.S. Rep. Todd Tiahrt began a campaign to award the medal to Kapaun. In January, the Kansas congressional delegation asked Secretary of Defense Leon E. Panetta to recommend approval of the medal for Kapaun.

Emil Kapaun's remains rest in an unmarked grave near the Yalu River, next to hundreds of other American prisoners who never made it home. A few weeks after his death, the Chinese plowed the field where he was buried and planted a garden above the mass grave. Despite their efforts to erase his influence, Kapaun's legacy of selfless heroism inspired countless other prisoners to endure hardship with honor, courage and faith. Sixty-one years later, that legacy lives on. ★

GLOBAL MEDIC

By Scott R. Gourley

U.S. Air Force/Sgt. Ashley [illegible]



U.S. Air Force/Sgt. Erica Knight

Scott Gourley

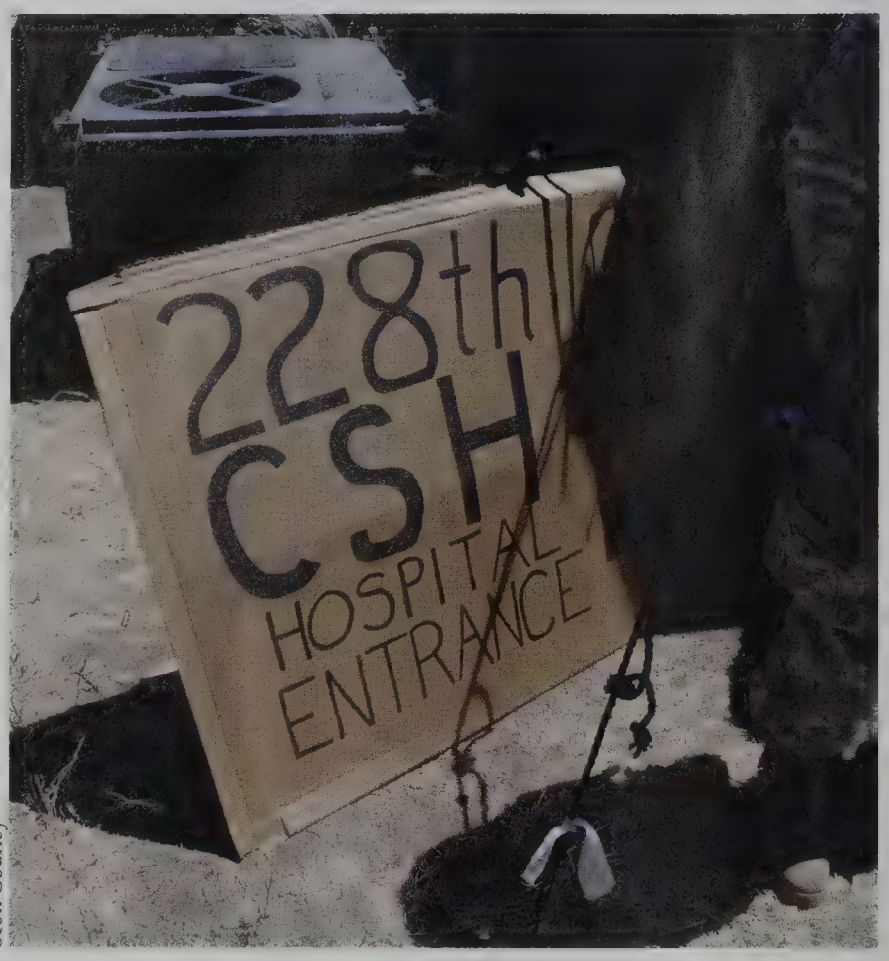
With the bulk of their field medical capabilities residing in the reserve component, Army training planners perform a critical balancing act to ensure continuation of the superlative care provided to U.S. warfighters. One chief element of that process is Global Medic, a series of large-scale functional medical exercises that facilitate reserve component training for medical units.

According to COL Michael Ellerbe, Medical Service Corps, deputy commander of Army Reserve Medical Command's Medical Readiness and Training Command (MRTC), Global Medic is an important element in supporting Army Future Force Generation of critical medical expertise. The event falls at roughly the halfway point in the Army Reserve five-year Force Generation cycle.

"We have an available year, a reset year and then three training years that progressively get more complex," Ellerbe explained. "In the reset year, when we've just come out

Clockwise from top: An Army UH-60 Black Hawk helicopter lands at Fort Hunter Liggett, Calif., in June during Exercise Global Medic 2012, an annual joint field training exercise for Army Reserve aeromedical evacuation systems and ground medical personnel. During the exercise, medical personnel check a simulated casualty at the field hospital and carry another to a helicopter.

Participating in Global Medic helps the Army Reserve train as it would in theater according to COL John Fasano (right), commander of the 228th Combat Support Hospital. Below, the physical design of the hospital is staked out within the first four hours.



Scott Gourley

U.S. Army

of deployment, we will be losing a lot of people and having an influx of new people, whom we then have to train. There's a big focus on those individual skills during the reset year. Then, in what we call train/ready (T/R) years one through three, we progressively go from squad to platoon to company to battalion collective training exercises. T/R-1 focuses primarily on squad- and platoon-level training. T/R-2 normally moves into larger elements of platoon- and company-sized training, and T/R-3 is company and battalion. Global Medic fits into T/R-2, which is the third year of the five-year cycle."

In 2011, the chief of the Army Reserve directed that the medical community synchronize its Global Medic functional exercise with the series of tactical Warrior Exercises (WAREX) conducted by Army Reserve training divisions. In 2012, two of these synchronized exercise sets were held, one by the 86th Training Division at Fort McCoy, Wis., and one by the 91st Training Division at Fort Hunter Liggett, Calif.

"WAREX is focused on such things as tactical skills lanes and reacting to an IED [improvised explosive device] attack, a sniper, an ambush, and so on," COL Ellerbe explained. "Global Medic is focused on team-based performance in a realistic training environment. We can have a medical brigade headquarters, a combat support hospital, a ground ambulance team and a forward surgical team, all operating in a battlefield environment and doing basically what they are supposed to do in combat, all of which is evaluated as part of Global Medic in a five-day field training exercise, which is the culmination of a 14-day exercise.

"In 2012," he said, "Global Medic was accredited by the joint staff as a joint exercise. So it's the first Army Reserve exercise ever to be joint accredited and, of all the joint exercises, it is the only medical one."

At Global Medic 2012 at Fort Hunter Liggett, evidence of the joint nature of the exercise was clearly seen in participation by the Air Force 209th Expeditionary Operations Group, which coordinated post-treatment air evacuations of stabilized casualties as well as the presence of U.S. Navy medical personnel in the casualty treatment phase.

Out in the field, COL John Fasano, commander of the 228th Combat Support Hospital, described the importance of the Global Medic 2012 exercise while providing a walk-through of that medical facility.

"From our perspective, we're out here to train as we would in theater," he said. "We want the warfighters to know that if something happens they will get the best care anywhere in the world—regardless of where it is—because we are just as good as any trauma center back home, maybe even better."

Setting up the hospital requires the physical design be staked on the ground within the first four hours—so that the unit is able to perform "tailgate medicine"—through the emergency room within 12 hours. Establishing the complete combat support hospital can require an additional 60 hours beyond that.

Scott R. Gourley, a freelance writer, is a contributing editor to ARMY.

"As a commander, this is one of the few opportunities hat I have to do this," COL Fasano acknowledged. "Because it takes three days to set up a combat support hospital, it's very difficult for us to train with the equipment. We would have to set it up, take everything out and then pack t all back up at the end. And with a two-day or three-day drill weekend you just don't have that opportunity."

For Global Medic 2012 the hospital was deployed in its smallest configuration of 44 beds.

"The 44-bed configuration has two ICUs [intensive care units], an intermediate care ward and a minimal care ward," COL Fasano explained. "As we expand to 84 beds we add more ICUs and more intermediate care capability. Then we can also be augmented by other specialties. For example, right now we have a head and neck team that's with us. We can also add other clinical specialties as modules that attach to us."

With the hospital established, the unit was awaiting the arrival of casualties, either by ambulance or at a nearby helipad. Patients included high-fidelity mannequins and live role players "moulaged" to present the medical personnel with specific casualty challenges.

Matt Sagaser, a Lockheed Martin medical trainer and moulage artist supporting Global Medic under that company's Reserve Training Sites-Medical (RTS-MED) contract, explained that the moulage process was designed to get the military personnel to think through the treatments and priorities.

"One wound might be very gory or messy, and the natural instinct might be to focus on that," he said. "But we'll also include a subtle injury that they are likely to miss, and it's that injury that will most likely kill someone more quickly."

Upon arrival at the combat support hospital, the mannequins and role players are quickly triaged, with the chief physician working with the staff to decide which patients could be sent to the minimal care detachment and which should be admitted to the hospital. The latter category is further divided between those requiring immediate surgery and those who are sent to one of the intensive care units to await an opening in an operating room.

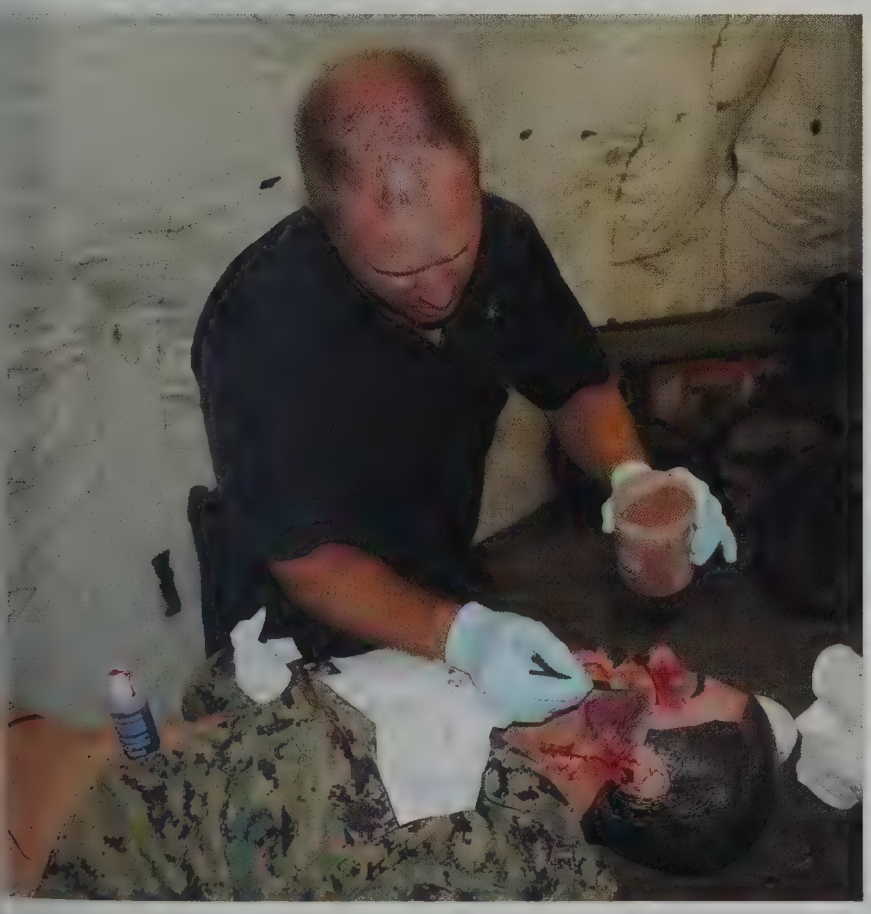
Ancillary services assigned to the 228th Combat Support Hospital at Fort Hunter Liggett included a pharmacy, laboratory and an X-ray area.

Not only were the areas all up and running for Global Medic, but in the case of radiology, the X-ray team was performing X-rays in support of the real-world mission at Fort Hunter Liggett.

"The only definitive medical care out here is back in King City," COL Fasano said, noting that a soldier needing an X-ray might not return for 10–12 hours. "Once we arrived they said, 'We understand you have an X-ray machine. Can we send our patients there?' We thought that was great. It's been great training for us and it gets the soldier returned to duty as quickly as possible. So for everyone out here it really was a win-win situation."

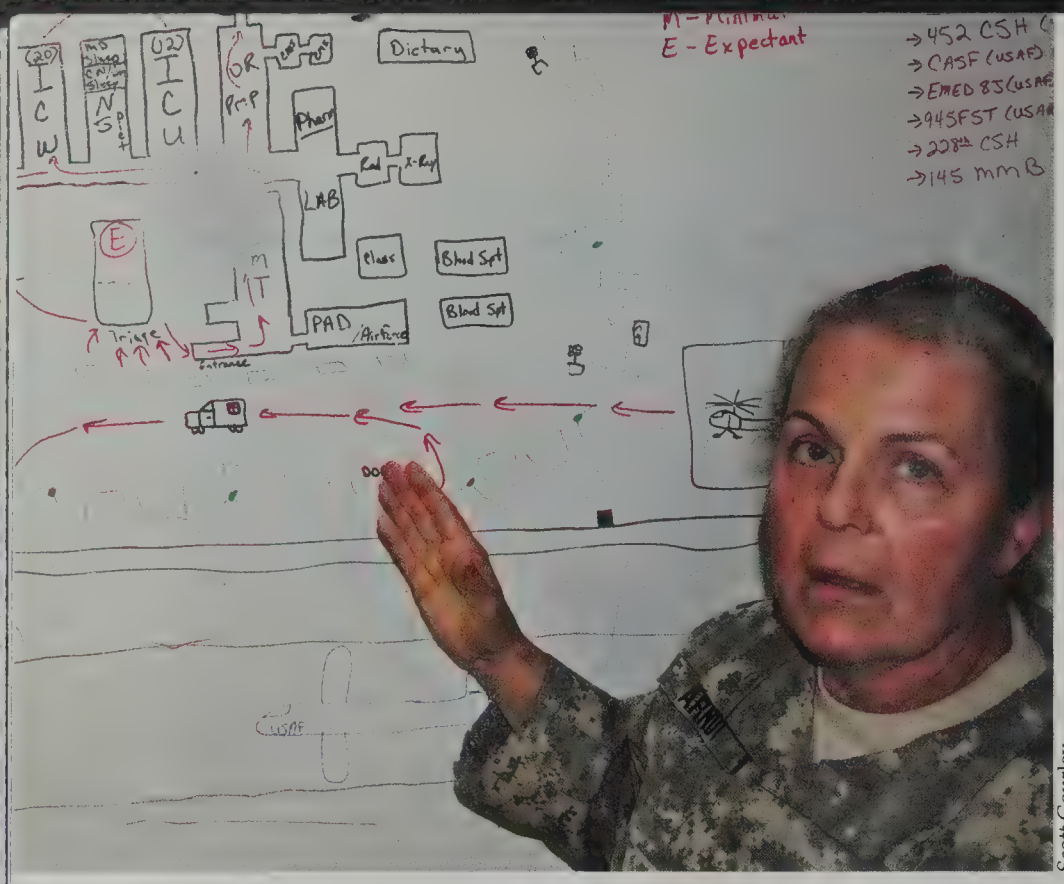
Although the combat support hospital X-ray capabilities had been upgraded to digital X-ray technologies, the commander noted that the exercise lacked the CT scan capabilities found in theater. That said, the event provided the 228th with the opportunity to utilize the latest "N-series" of upgraded/enhanced hospital equipment sets.

COL Fasano related an encounter he'd had with one of the doctors who had just completed the setup process.



Scott Gourley

A technician prepares a mannequin to play the role of a casualty during Global Medic. Although the emergency room can be ready for patients within 12 hours, it takes an additional 60 hours to establish the complete support hospital, which includes a pharmacy, laboratory and X-ray area (above, right).



Scott Gourley

COL Roxanne Arndt explains a diagram of the area's air routes and location of various units at Global Medic. In 2012, the exercise was accredited by the Joint Staff as a joint exercise, the first Army Reserve exercise ever to be so designated.

"The doctor said, 'I felt bad opening up the packages because these are brand new pieces of medical equipment.' But the RTS-MED folks kept telling him, 'Open it up. This is your chance to use this stuff.' He said, 'Usually you might come to something like this and find old equipment, but there is more of the latest and greatest stuff out here now than anywhere I've seen, and it is comparable to what you would see in a fixed facility.'"

"The environment is a lot different out here from what it is doing nursing care in a big city," said COL Roxanne Arndt, chief nurse for the 228th, who was participating in her third Global Medic event. She noted that many members of the unit had deployed to Iraq together in 2004 and also were bringing the lessons of that set of real-world experiences back into the exercise.

"It's important for people to know that we do our jobs the same way with the same equipment," she said, "and it's important that the nurses realize they can deliver the same level of care in either a fixed facility or in a tent."

Calling that realization empowering to her nursing staff, she added, "A lot of these people have never done this before. And when you haven't done it you have no concept of what it's like. Everyone thinks, 'We're doing it in a tent so there are so many things we won't have.' In fact that's not true."

Perhaps more significant, Global Medic facilitates the critical human interactions of the medical treatment teams.

"We have nurses and doctors we have not seen before," COL Arndt said, "but we all come together here and immediately we click, and then we get the corpsmen in and immediately we click. There are none of the issues that come up with a new job. Out here we just all come together right away."

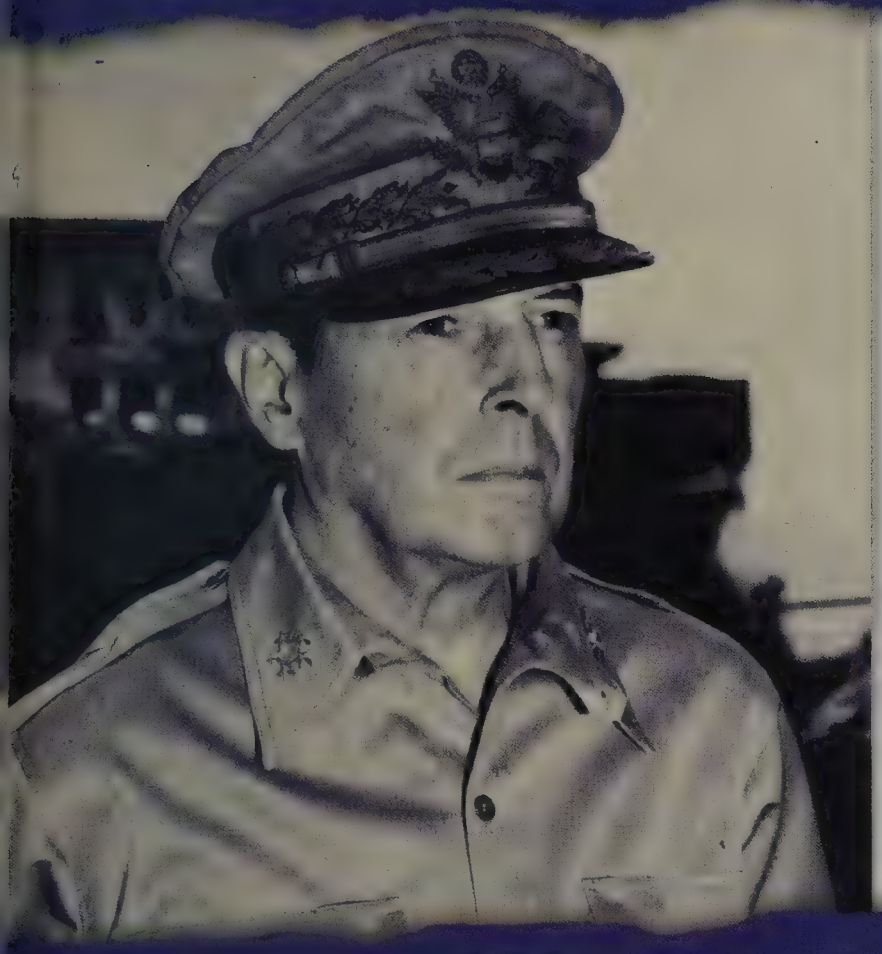
In summarizing the benefits of Global Medic 2012 for the 228th Combat Support Hospital team, COL Fasano said, "One of the most difficult things to work out is that you have folks who have come together here, but they don't normally work in an environment like this. Back on their own wards in their own hospitals, they know how things work. Out here, however, it's a new team, and for them the only time they get to practice how things will flow in the real world is when they get to come out to do something like this. So, from a value perspective, I can't give them anything better than this, and when they come out of here they will know that when they have to go and do this for real this is how it is going to work. And it's better that we do this now because you don't have time to figure it out when you go into theater."

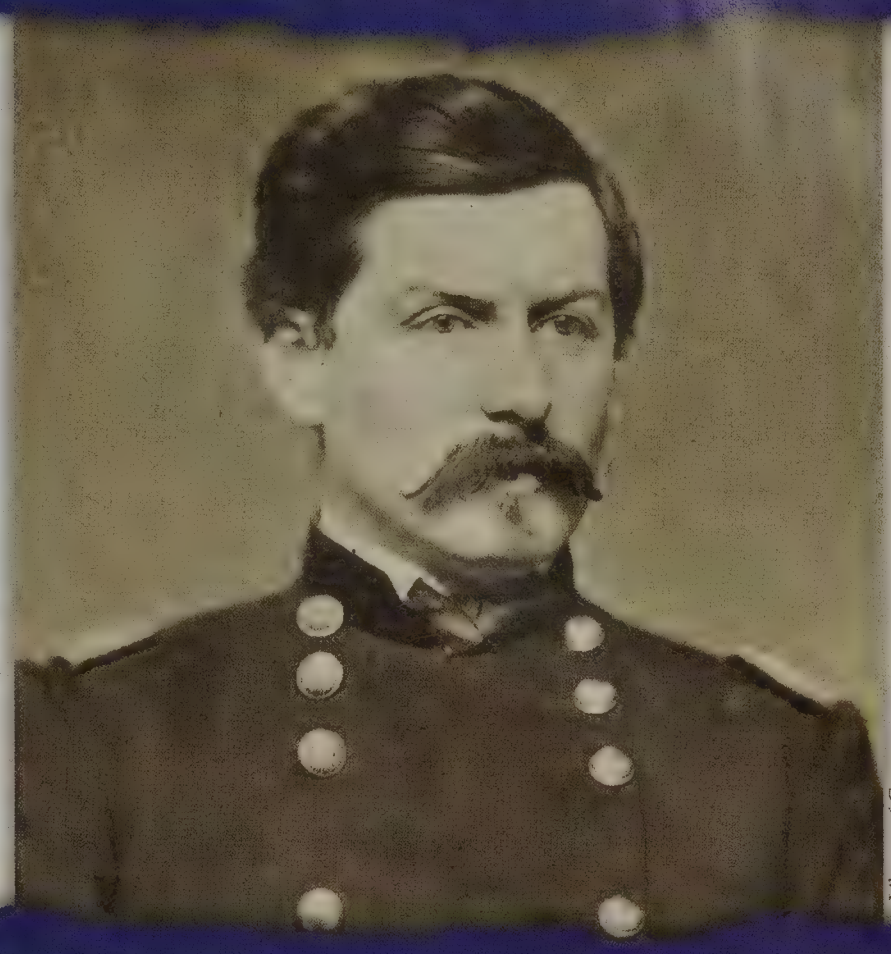
As of this writing, MRTC is planning three Global Medic events during fiscal year 2013 in sync with warrior exercises.

"It is the goal of the Army Reserve to provide trained and ready land forces to support the Army's missions," COL Ellerbe said. "In our case, those forces involve the medical mission. And it is the goal of Global Medic to train those Army Reserve medical units to provide capable, trained and ready medical units in support of the Army's missions, whether they be theater-security cooperation or unified land operations in a combat theater." ★

Medical personnel evaluate a simulated casualty. Role players and mannequins are quickly triaged on arrival at the combat support hospital and are sent to the minimum care detachment or are admitted.

Fall from Grace:





Library of Congress

The Parallel Careers Of General of the Army Douglas MacArthur And MG George B. McClellan

By COL Cole C. Kingseed
U.S. Army retired

Since its founding in 1775, the U.S. Army has fielded a formidable array of warriors led by distinguished commanders. Few of these leaders have proved as controversial as MG George B. McClellan and General of the Army Douglas MacArthur. Though both had considerable military talent and achieved enormous popular support in their time, MacArthur and McClellan are remembered today more for their challenges to civilian authority and their removal

Library of Congress

A 1901 print depicts the Cadets' quarters at the U.S. Military Academy at West Point, N.Y., where George B. McClellan graduated second in the Class of 1846 and Douglas MacArthur graduated first in 1903.

from command than for their military prowess. Through their extremely rapid rise to the pinnacle of the military profession, these remarkable commanders also exemplify the limitations of unrivaled egotism and insatiable ambition. History loves comparisons, and McClellan and MacArthur provide abundant parallels.

The Rise to Fame

Both men established enviable records at the U.S. Military Academy at West Point. McClellan graduated second in the Class of 1846, while MacArthur graduated first in the Class of 1903. As junior officers, both men established reputations for courage under fire: McClellan in the Mexican-American War of 1846–48 and MacArthur in the Vera Cruz expedition of 1914. Fifteen years following graduation from West Point, both achieved general officer rank as they burst on the national scene and captured the public imagination.

The excessive vanity that characterized both future commanders was evident early on while they were cadets at West Point. At the U.S. Military Academy, his peers elected McClellan president of the Dialectic Society, the intellectual cream of West Point's upperclassmen. As he approached graduation, McClellan felt that his overall achievements entitled him to first place in the class of 1846. He wound up second to Cadet Charles S. Stewart, and McClellan did not accept his runner-up status gracefully. "I must confess that I have malice enough to want to show them that if I did not graduate head of my class, I can nevertheless do something," he wrote his family. True to his word, McClellan would command 19 of his classmates in the Army of the Potomac.

MacArthur mirrored McClellan's defense of his presumed rights and easily wounded egotism. MacArthur missed several of the weekly tests in mathematics during his second year due to illness. When he was informed that he would have to take a special examination with the "goats" of the class to avoid failing the course, Cadet MacArthur went directly to the instructor and demanded his name be removed from the list due to his superior standing on the tests he had already taken. Told that his stance was challenging a direct order, MacArthur informed the officer, "I will not take the test." The next morning an orderly arrived at MacArthur's room and informed him that his name had been removed from the list. The instructor had backed off his demand, not as much due to MacArthur's insistence as to the instructor's desire not to alienate MacArthur's father, MG Arthur MacArthur Jr., who was expected momentarily on a well-publicized visit to see his son.

The similarities between McClellan and MacArthur are even more apparent when considering the public adulation that accompanied their rise to fame. As he took command of the defenses of Washington in the summer of 1861, McClellan wrote, "I find myself in a new & strange position here—Presdt, Cabinet, Genl Scott & all deferring to me—by some strange operation of magic I seem to have become *the* power of the land." Dubbed the Young Napoleon by the press and Little Mac by his soldiers—McClellan was only 34 years old when Lincoln conferred on him the title of general in chief of all Union armies—McClellan assuaged Lincoln's fears that "this vast increase in responsibilities … will entail a vast labor upon you" by assuring him, "I can do it all"—and then did nothing.

MacArthur, too, savored the adulation that greeted his "escape" from the Philippines in March 1942, just after President Franklin Roosevelt directed his transfer to Australia so that MacArthur could eventually play an integral role in leading the Allies to victory against the Japanese in World War II. Though Roosevelt was not personally fond of his Far Eastern general, he released a public statement that said, "Every man and woman in the United States admires with me General MacArthur's determination to fight to the finish with his men in the Philippines." He added, however, that "all important decisions must be made with a view toward the successful termination of the war," so that is why, Roosevelt explained, "every American, if faced individually with the question as to where General MacArthur could best serve his country, could come to only one an-

---

COL Cole C. Kingseed, USA Ret., Ph.D., a former professor of history at the U.S. Military Academy, is a writer and consultant.

wer." At the urging of Army Chief of Staff GEN George C. Marshall, Congress then bestowed the Medal of Honor on MacArthur for his heroic defense of the Bataan peninsula. George Gallup's American Institute of Public Opinion discovered in a poll in early May that MacArthur had suddenly emerged as one of the top five men considered by the people as "Presidential material for 1944." Not surprisingly, MacArthur bathed in the limelight and ensured that he remained on center stage by monopolizing all the press releases emanating from his headquarters in Australia.

MacArthur was showered with the praise he so earnestly coveted following his pledge, "I shall return!" (to the Philippines). In the aftermath of his arrival in Australia, a reporter with *The New York Times* announced that 13 babies born in the city between March 1 and April 8 were given the first and middle names of Douglas MacArthur. Shortly thereafter, the Newspaper Guild of New York voted to award him its most prestigious honor, the Column One, Page One Plaque.

Fighting Their Own Battles

Neither McClellan nor MacArthur worked well with civilian authority, and, in particular, neither respected the prerogatives or the problems of the Presidents they served.

Embroiled in a bitter civil war, all Lincoln wanted was a field commander who was not afraid to engage the enemy—a general who would fight and use the superior resources of the North to grind down the Confederacy. The enemy army—not Richmond—must be your objective, the President emphatically stated to every commander of the Army of the Potomac.

Speed in engaging the Confederate army was also essential in Lincoln's estimation. "It is of great importance you should move as soon as possible," the President informed MG Ambrose E. Burnside, a McClellan favorite, on December 26, 1861. "Consumption of time is killing us."

Although Lincoln's call for action would become a familiar refrain, the commanders he appointed often dallied and wasted the best months for campaigning, and no commander tried the President's patience with the slow pace of combat more than McClellan. Supremely convinced of his martial prowess, Commander McClellan would move against the enemy only when *he* felt conditions warranted it.

Dissatisfied with McClellan's unwillingness to attack Confederate forces entrenched at Manassas Junction astride the battlefield of Bull Run, Lincoln took an extraordinary step at the end of January 1862 and issued Special War Order No. 1, directing the Army of the Potomac to

Library of Congress

MacArthur and McClellan, both excessively vain, did not work well with civilian authority and failed to respect the prerogatives or problems of the Presidents they served. Each officer enjoyed a meteoric rise to the top of his profession but was limited by his egotism and unbridled ambition.

move against the enemy on or before February 22. Again McClellan vacillated, prompting another Presidential visit to encourage his advance. By the time McClellan finally moved his army to the base of the James River-York River peninsula in the spring of 1862, Lincoln was already questioning his indispensability.

Six months later, in the aftermath of Confederate GEN Robert E. Lee's failed invasion of Maryland, Lincoln paid a final visit to McClellan's headquarters to urge him to cross the Potomac and attack the enemy. After several additional weeks of inaction, McClellan transmitted a report about his lame and sore-tongued horses to the War Department to justify his slow pursuit of Lee. Lincoln exploded: "Will you pardon me for asking what the horses of your army have done since the Battle of Antietam that fatigues anything?"

McClellan finally crossed the Potomac into Virginia, but by then, Lee's Army of Northern Virginia was firmly entrenched in the northern Virginia countryside. For Lincoln, Lee's escape proved the final straw. In a private conversation with Francis Preston Blair, Lincoln said he had "tried long enough to bore with an auger too dull to take hold. I said I would remove him if he let Lee's army get away from him, and I must do so. He has got the 'slows,' Mr. Blair."

Lincoln's lack of confidence in McClellan mirrored Little Mac's disdain for the President. McClellan was astonished when Lincoln issued his preliminary emancipation proclamation on September 22, 1862, in the immediate aftermath of the Union victory at Antietam. Two days later Lincoln suspended the privilege of habeas corpus and specified military trial for anyone charged with discouraging enlistments and militia drafts or with any "disloyal practice" of giving aid and comfort to the enemy.

Lincoln's pronouncements ran counter to McClellan's own political philosophy. In a July 1862 letter written to the President, McClellan had already expressed his firm opposition to emancipation and had even warned that the Army might "disintegrate" if the war became a fight for abolition as opposed to a fight for union. On September 17, following the Battle of Antietam, the general was fast to voice his opposition to the administration's path. McClellan professed to his wife that he would never fight for the "accursed doctrine ... of a servile insurrection," writing that "it is too infamous."

On September 26, just four days after Lincoln issued the proclamation, McClellan wrote William Aspinwall, a wealthy and influential Democratic Party leader. He told Aspinwall that he wanted to know how Northern governors viewed the President's proclamations "inaugurating servile war, emancipating the slaves, and at one stroke of the pen changing our free institutions into despotism." McClellan would continue to cultivate the favor of high-ranking Democrats throughout the war, and in 1864, he accepted the Democratic nomination for the presidency.

As did McClellan, MacArthur demonstrated little respect for his commander in chief. While serving as Army Chief of Staff in 1932, MacArthur faced the dilemma of confronting the Bonus Army that began descending on Washington in late May. The unemployed "army" of World War I veterans sought early payment of pledged bonuses to offset joblessness and financial insecurity. By the end of June the ranks of the so-called Bonus Expeditionary Forces (BEF) had swollen to more than 20,000. The situation had become a political embarrassment to President Herbert Hoover. On July 28, the situation erupted, prompting Secretary of War Patrick Hurley to call upon MacArthur to take appropriate action to "maintain law and order in the District [of Columbia]."

MacArthur donned his military uniform—senior officers on duty in the War Department usually wore civilian attire while in Washington—and accompanied the troops against the bonus marchers, "not with a view of commanding the troops, but to be on hand as things progressed, so that he could issue necessary instructions on the ground," according to D. Clayton James in *The Years of MacArthur, Volume I: 1880–1941*. To avoid the impression that the U.S. Army was abridging free speech, President Hoover directed Hurley to order MacArthur not to pursue the BEF across the Anacostia River, where the billets of the Bonus Army were located. According to MAJ Dwight D. Eisenhower, serving as MacArthur's aide, the Chief of Staff ignored the Presidential order. "In neither instance," wrote Eisenhower, "did General MacArthur hear these instruc-

Library of Congress / Alexander Gardner

President Lincoln visited MG McClellan on the Antietam battlefield in 1862. McClellan's vacillation and slow pace of combat tried the President's patience and prompted his visits to urge the general to advance.

tions. He said he was too busy and did not want either himself or his staff bothered by people coming down and pretending to bring orders."

Two decades later, commanding troops in the Korean War, MacArthur again followed McClellan's path by rejecting the decisions of his civilian leadership. MacArthur simply refused to acquiesce to President Harry Truman's strategy to fight a limited war. In MacArthur's eyes, success required total military victory. While Truman and Secretary of State Dean Acheson sought viable alternatives, MacArthur proposed an "annihilation or evacuation" scenario once the People's Republic of China entered the conflict. Despite MacArthur's insistence that the war be expanded into Manchuria, Truman felt strongly that a negotiated settlement was a legitimate substitute for military victory. MacArthur's blatant refusal to accept these evolving war aims made his subsequent relief from command unavoidable.

Truman Library

President Truman and GEN MacArthur met face-to-face for the first time in October 1950 on Wake Island to discuss the Korean War. The general's resistance to Truman's aims led to MacArthur's dismissal.

Like the frustrated McClellan, MacArthur was in frequent contact with political opponents of the current administration. Just as McClellan had solicited support from the Democratic opposition to President Lincoln, MacArthur courted the support of Truman detractors, freely criticizing administration policy in communiqués to Republican Party House members. Long considered the darling of the Republican Party, he was frequently mentioned as a possible Presidential candidate in 1944 and 1948.

The Error of Their Ways

While both McClellan and MacArthur actively opposed the policies of their civilian leaders, both commanders committed serious military errors, making it politically feasible for their respective commanders in chief to relieve them from command.

Because he frequently overestimated the strength of Lee's army, McClellan squandered the chance of a crushing victory at Antietam, throwing away one of the best opportunities any general had in the Civil War to achieve a Napoleonic-style victory. His subsequent delay in pursuing Lee into Virginia finally caused Lincoln to lose patience.

MacArthur also mistook the size of the enemy, but whereas McClellan consistently overestimated the size of his foe, MacArthur underestimated the size of his enemy. As Chinese Communist forces prepared to attack United Nations forces as they approached the Yalu River in October 1950, MacArthur assured the President in their only face-to-face meeting on Wake Island on October 15 that there was little chance of Chinese intervention. "Only fifty to sixty thousand could be gotten across the Yalu River. They have no air force. ... If the Chinese tried to get down to Pyongyang, there would be the greatest slaughter." Weeks later, the initial reports of Chinese intervention were received, but MacArthur summarily dismissed the reports even though battlefield commanders confirmed the presence of significant numbers of Chinese troops. The result of MacArthur's refusal to face reality was a bloody repulse at Unsan and the Chosin Reservoir in North Korea and a prolonged retreat of the United Nations armies south of the 38th Parallel.

The Accountability Deficit

Neither general accepted accountability for his respective military defeats. Harboring a disdain for the nation's political leadership, McClellan and MacArthur ignored their own misjudgments and accused their civilian authorities of snatching defeat from the jaws of victory.

As McClellan's Army of the Potomac advanced up the Virginia peninsula toward Richmond in May 1862, McClellan wrote: "When I see the hand of God guarding one so weak as myself, I can almost think myself a chosen instrument to carry out his schemes," and later: "I know that God may even now deem best to crush all the high hopes of the nation and this army—I will do the best I can to insure success and will do my best to be contented with whatever result God sees fit to terminate our efforts."

By the time he reached the outskirts of the enemy capital, however, McClellan was already predicting disaster. Infuriated that Lincoln held back MG Irvin McDowell's corps to defend Washington, D.C., in the aftermath of Stonewall Jackson's Valley Campaign of 1862, McClellan cabled, "I will do all that a General can do with the splendid Army I have the honor to command and if it is de-

MG McClellan (center, right), conferring with his staff of eight, earned a reputation for courage under fire during the Mexican-American War of 1846–48 and was commissioned a major general in the regular Army in 1861.

stroyed by overwhelming numbers ... the responsibility can not be thrown on my shoulders—it must rest where it belongs." After Gaines' Mill on June 27, McClellan wrote, "If I save this Army now I tell you plainly that I owe no thanks to you [Secretary of War Edwin M. Stanton] or any other persons in Washington—you have done your best to sacrifice this Army." Small wonder why Lincoln and Stanton found McClellan so irritating.

MacArthur also sought to escape accountability when his military fortunes were reversed by the enemy's action. Before the Chinese Communists entered the war in the late autumn of 1950, MacArthur ordered the bridges across the Yalu River, over which armies of Chinese Communists might cross to reinforce the North Korean forces, to be immediately bombed to sever lines of communication between Manchuria and North Korea. An immediate dispatch from Secretary of Defense George C. Marshall countermanded MacArthur's order and directed him "to postpone all bombing of targets within five miles of the Manchurian border." MacArthur informed his chief of staff, "For the first time in military history, a commander has been denied the use of his military power to safeguard the lives of his soldiers and safety of his army." If he were forced to withdraw, MacArthur had found his scapegoat.

U.S. Army

MacArthur (seated), observes the shelling of Inchon from the U.S.S. McKinley *with BG Courtney Whitney (left), Far East Command, and GEN Edward Almond (right), commanding general of X Corps, in September 1950.*

Relief From Command: Their Shared Fate

In retrospect, the most striking similarity between McClellan and MacArthur is that both commanders were summarily relieved of their commands.

In the aftermath of the Seven Days' Battles, McClellan predicted that the Lincoln administration would force him to resign. If they did, McClellan wrote, they would "begin to reap the whirlwind that they have sown." He wrote his wife, Ellen, on July 27, 1862: "I am confident that he [Lincoln] would relieve me tomorrow if he dared do so. His cowardice alone prevents it. I can never regard him with other feelings than those of thorough contempt—for his mind, heart and morality."

Such blatant insubordination, albeit in private correspondence, coupled with his well-publicized refusal to bring the President into his confidence and his unwillingness to address the enemy, merited McClellan's immediate relief. Why Lincoln did not relieve McClellan earlier than he did was quite clear. Despite McClellan's failure before Richmond, Lincoln needed the popular commander at the point of the country's greatest crisis after Second Manassas. When Lee invaded Maryland in September 1862, the President felt compelled to restore McClellan to command even though he had serious misgivings. When Ben-

jamin Wade, the chairman of the Joint Committee on the Conduct of the War, denounced McClellan's reappointment and demanded that anyone but McClellan should be put in command, Lincoln responded, "Wade, anybody will do for you, but not for me. I must have somebody." Lincoln thus gave McClellan one more chance to redeem his reputation, but McClellan failed to meet Lincoln's expectation. Then and only then, Lincoln relieved McClellan of command of the Army of the Potomac and sent him to New Jersey to await orders that never arrived.

Once relieved, McClellan could only say, "They have made a great mistake—alas for my poor country—I know in my innermost heart she never had a truer servant … I do not see any great blunders—but no one can judge of himself." Naturally he found blame elsewhere: "We have tried to do what was right—if we have failed it was not our fault."

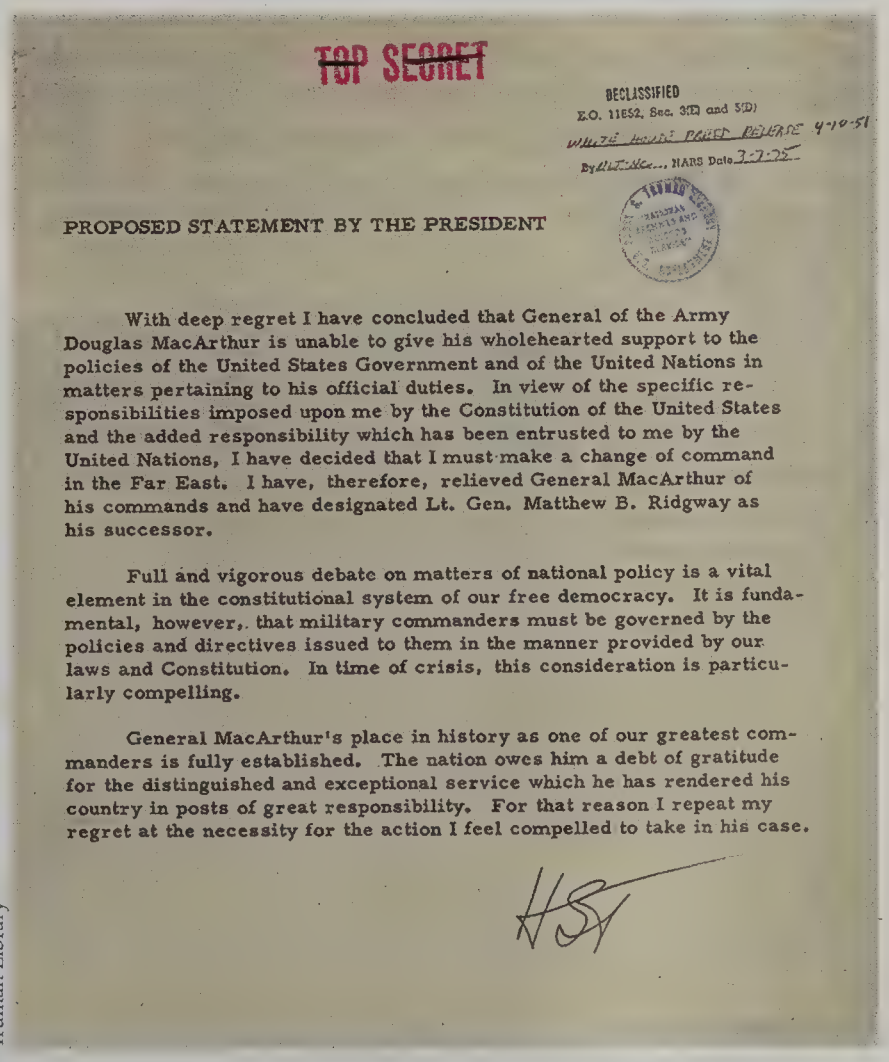
MacArthur's stubborn unwillingness to accept Truman's war aims—and execute military strategy consistent with it—lay at the heart of his command failure. In addition, his defeatist-sounding communiqués in the aftermath of Chinese intervention (and resulting battle failures in North Korea) did nothing to increase his prestige among the highest-level decision makers in the Truman administration. The final straw in MacArthur's dismissal was his penchant for public chatter: Against direct orders to clear public pronouncements with the administration, MacArthur repeatedly released press statements that interfered with potential truce negotiations.

MacArthur's criticism of President Truman following his abrupt relief from command paralleled that of McClellan. In his memoirs, MacArthur noted that Truman's nerves were at the breaking point—"not only his nerves, but what was far more menacing in the Chief Executive of a country at war—his nerve." What rankled MacArthur most was the manner in which he was notified after the press had already leaked the news. "No office boy, no charwoman, no servant of any sort would have been dismissed with such callous disregard for the ordinary decencies," he later wrote. "No slightest opportunity was given me to explain my position, to answer allegations or objections, to present my future concepts and plans," MacArthur recalled in his postwar reminiscences.

Their Last Years

Given their refusal to acknowledge civilian control of the military, it seems remarkable that McClellan and MacArthur harbored Presidential ambitions of their own.

McClellan ran against Lincoln in the Presidential race of 1864 and was soundly defeated. He retired from active military service and subsequently served as governor of New Jersey for a single three-year term. He was only 58 years old when, on October 29, 1885, he died from complications following a severe attack of angina pectoris. His death, an-



TOP SECRET

DECLASSIFIED
E.O. 11652, Sec. 3(E) and 5(D)
WHITE HOUSE PRESS RELEASE 4-10-51
By ..., NARS Date 3-7-75

PROPOSED STATEMENT BY THE PRESIDENT

With deep regret I have concluded that General of the Army Douglas MacArthur is unable to give his wholehearted support to the policies of the United States Government and of the United Nations in matters pertaining to his official duties. In view of the specific responsibilities imposed upon me by the Constitution of the United States and the added responsibility which has been entrusted to me by the United Nations, I have decided that I must make a change of command in the Far East. I have, therefore, relieved General MacArthur of his commands and have designated Lt. Gen. Matthew B. Ridgway as his successor.

Full and vigorous debate on matters of national policy is a vital element in the constitutional system of our free democracy. It is fundamental, however, that military commanders must be governed by the policies and directives issued to them in the manner provided by our laws and Constitution. In time of crisis, this consideration is particularly compelling.

General MacArthur's place in history as one of our greatest commanders is fully established. The nation owes him a debt of gratitude for the distinguished and exceptional service which he has rendered his country in posts of great responsibility. For that reason I repeat my regret at the necessity for the action I feel compelled to take in his case.

Truman Library

A Currier & Ives print promotes McClellan's (failed) Democratic run for the Presidency in 1864. Truman's proposed statement on the dismissal of GEN MacArthur expresses regret at having to relieve the commander, whose public criticism of American policy necessitated the action.

nounced just three months after the nation's greatest military hero, Ulysses S. Grant, had passed away, attracted national attention and appeared on the front page of every major newspaper across the country.

Following his relief from duty as military commander, MacArthur returned to the United States to a hero's welcome and gave a historic address to Congress. His luster began to dim, however, after congressional hearings disclosed some of the complexities faced by the administration in the Far East. His advocates hoped that MacArthur's keynote address at the Republican Convention in Chicago would propel him to his party's nomination for president in 1952. The nomination fell instead to Dwight D. Eisenhower. "The best clerk I ever had," MacArthur allegedly remarked once Ike entered the White House. Other than a highly publicized address to the Corps of Cadets at West Point in May 1962 on the occasion of his receipt of the Sylvanus Thayer Award, MacArthur faded into obscurity. He spent his last decade in an elaborate suite in the Towers of the Waldorf Astoria in New York City. On April 5, 1964, he died of biliary cirrhosis. Not surprisingly, he planned every detail of his funeral. MacArthur lies today in the magnificent MacArthur Memorial in Norfolk, Va.

Attributes Unshared

Despite the similarities between McClellan and MacArthur, there were important differences as well. MacArthur's career spanned half a century, including service in two world wars and the Korean conflict. Over the course of the Great War, he was repeatedly cited for heroism by his senior officers. The recipient of two Distinguished Service Crosses, the Distinguished Service Medal, seven Silver Stars and two *Croix de Guerre* medals, MacArthur emerged from World War I as the most highly decorated officer in the American Expeditionary Forces. Upon his own elevation to corps-level command, MG Charles T. Menoher said of his former chief of staff, "MacArthur is the bloodiest fighting man in this army." Command of the Southwest Pacific theater in World War II and of the United Nations command during the initial months of the Korean War only added to MacArthur's laurels.

No biographer, no matter how pro-McClellan, ever mistook McClellan for a fighting general. McClellan's rise to fame was far more meteoric than even MacArthur's. In contrast to MacArthur's sterling battlefield record, McClellan's star shone brightly for a scant 18 months before he fell into disfavor with the Lincoln administration. In many ways, Little Mac was a victim of his initial success against mediocre opposition. Battling Lee and the Army of Northern Virginia proved a far more daunting task than fighting his initial opponents in western Virginia in 1861. What is most revealing in McClellan's case is how rapidly he fell from grace following his arrival in the nation's capital in July. What the public and Lincoln demanded was action, and McClellan's refusal to act decisively weakened his position as general in chief from the outset.

McClellan never comprehended that to defeat the enemy, he would have to witness the loss of a portion of the very army that he had so skillfully created. Every observer noted that McClellan proved an adept trainer of troops. What his generals recognized was something the public could not possibly know: Their favorite general lost confidence once the battle was joined. There is little doubt that McClellan's true genius lay in organization, not in tactics. Both before Richmond and along the banks of Antietam Creek, McClellan designed elaborate plans, but then he abandoned them as soon as his army made contact with the enemy. According to Stephen Sears, McClellan's fore-

A pencil drawing on brown paper by Civil War artist Alfred Waud depicts McClellan, accompanied by GEN Ambrose Burnside, taking leave of the Army of the Potomac in November 1862. Lincoln tapped Burnside to succeed McClellan as commander of the Army of the Potomac.

On his first visit to the United States in 14 years, MacArthur addresses an audience of 50,000 at Chicago's Soldier Field in April 1951, the month he was relieved of command.

most biographer, Little Mac had "lost his inner composure and with it the courage to command under the press of combat."

Loss of confidence was almost never a problem for MacArthur. In the summer of 1950, when the military fortunes of the United Nations seemed at their nadir, MacArthur conceived and, later in September, boldly executed a turning movement deep into the North Korean rear at Inchon. The plan to invade Inchon was MacArthur's military masterpiece and gave him the opportunity to force his will on the unconvinced Joint Chiefs of Staff. Most opposed to MacArthur's plan were Army Chief of Staff J. Lawton Collins and Chief of Naval Operations Forrest P. Sherman, but he was confident that, in spite of the odds, Inchon would succeed.

Inchon, of course, succeeded and further convinced MacArthur that he had a better grasp of strategy than Washington bureaucrats, whose fear of failure was greater than their drive for success. Said MacArthur biographer Geoffrey Perret, "The most fitting conclusion to MacArthur's life would have been to die a soldier's death in the waters off Inchon at the height of his glory with his legend not simply intact, but magnified beyond even his florid imaginings."

Simply stated, MacArthur believed in the hard hand of war. McClellan did not. Schooled in the Napoleonic art of war, which sought a single, decisive battle of annihilation, McClellan failed to recognize that he could achieve exactly that when he trapped Lee's army at Sharpsburg, Md., on September 17, 1862. Badly bruised, Lee's army remained intact when a single push, using readily available reserves, would have destroyed it and might have ended the war in one bold stroke similar to MacArthur's success at Inchon 88 years later. Unlike MacArthur, however, McClellan could not order himself to make the attack, and thus Lee's battered army escaped to Virginia to fight another day.

In contrast, MacArthur's proposal to establish a nuclear belt five miles on each side of the Yalu River risked a nuclear war that the Truman administration wisely wished to avoid. In the bitter fighting in Manila and later in Seoul, MacArthur demonstrated his willingness to wage total war, regardless of collateral damage. Such escalation of potential casualties would have found no place in McClellan's heart.

Putting It All in Perspective

So where does this analysis leave us? McClellan and MacArthur were certainly the military heroes of their days. Both commanders viewed themselves as preeminent military strategists. Both demonstrated admirable military attributes and were greatly admired by their troops. Yet both McClellan and MacArthur overstepped their bounds by crossing the invisible line that separated civil-military control of the armed forces.

In summing up his services to MacArthur both in Washington and the Philippines, GEN Eisenhower could just as easily have been describing McClellan when he stated emphatically: "Most of the senior officers I had known always drew a clean-cut line between the military and the political. Off duty, among themselves and close civilian friends, they might explosively denounce everything they thought was wrong with Washington ... and propose their own cure for its evils. On duty, nothing could induce them to cross the line they, and old Army tradition, had established. But if General MacArthur [and for purposes of comparison, General McClellan as well] ever recognized the existence of that line, he usually chose to ignore it."

Leave it to Ike to place things into perspective. ★

Under the patronage of His Highness Sheikh Khalifa Bin Zayed Al Nahyan
President of the UAE & Supreme Commander of the UAE Armed Forces

17-21 February 2013
ADNEC, Abu Dhabi, United Arab Emirates

UAE ABU DHABI
IDEX ايدكس 2013

DEFENCE TECHNOLOGY FOR THE FUTURE.

The Middle East and North Africa's largest defence and security exhibition returns to Abu Dhabi in February 2013. Where the global defence industry will meet influential VIP's, decision makers, military personnel and key investors at IDEX 2013.

To book an exhibition stand or outside space email info@idexuae.ae
For detailed information about IDEX 2013 visit www.idexuae.ae

Headline Sponsor: TAWAZUN توازن

Organised by: ADNEC

In association with: UAE Armed Forces

Co-located with: NAVDEX NAVAL DEFENCE EXHIBITION 2013

CompanyCommand

Building Combat-Ready Teams

To: Company Commanders
From: Company Commanders

What Do You Want Most in a Leader?

In the CompanyCommand forum (http://CC.army.mil), we have been talking about the attributes that we value in leaders. We framed two questions to spark the conversation:

Question 1: What do you want in a subordinate?
Question 2: What do you want in a boss?

In this article, we report on some of the responses. First, however—and we know this requires some discipline—take a few minutes to brainstorm your own ideas. (You will be glad you did!) After you have a list, hone it down and rank order the top five for each question. In other words, list the top five attributes/competencies that you personally want in a subordinate, then do the same for a boss.

Take a look at your list. Does anything jump out at you? Any surprises? Do you want different things in a subordinate from what you want in a boss?

Now you get to read the article. As you read, compare and contrast your perspectives with those of other valued members of the profession. Read with an open mind, looking for new insights and connections.

Fran Murphy
D/2-34 AR

Subordinate: (1) hardworking (2) honest (3) loyal (4) physically fit (5) proactive.

Boss: (1) smart (2) warfighter (3) charismatic (4) proactive (5) positive.

Joe Byerly
C/3-7 Cavalry and HHC/1-64

Subordinate: (1) competent (2) desire to learn (3) critical thinker (4) authentic.

Boss: (1) competent (2) good mentor (3) authentic (4) listens.

Derrick Zanders
HHB/2-18 FA

Subordinate: (1) confidence (2) listening/people skills (3) initiative (4) leads by example (5) compassion.

Boss: (1) trust (2) genuine concern (3) open to communication (4) clear intent with 3–5 priorities (5) active listener.

Kevin Hadley
C/1-504 PIR

I want the same basic things in both my subordinates and bosses: (1) virtue (excellent character); (2) leadership (provide purpose, direction, motivation); and (3) tactical competence.

That is a pretty tall order. It requires years of formation—vicarious through reading and experiential through mistakes made (and not a little innate potential).

Tony Burgess
A/2-35 IN & LRSD/25th ID(L)

This exercise made me *think*. I brainstormed 20 different attributes and rank ordered the top five. I want my subordinates to: (1) be competent, quick learners; (2) work hard; (3) be team-oriented; (4) demonstrate initiative; (5) take responsibility.

I want my boss to: (1) have exceptional judgment/discernment; (2) have and communicate vision; (3) be concerned about the important things; (4) be collaborative and open to new ideas; (5) let me "run with it."

As I reflected, I began to see that a boss with exceptional judgment and discernment—what you could call wisdom—is priceless. The other attributes may not matter if you don't have that first one.

Anonymous

My question to myself: "What would my answer be if I used Army doctrine?" In the newly published ADP [Army Doctrine Publication] and ADRP [Army Doctrine Reference Publication] 6-22, *Army Leadership*, I found the "Army Leadership Requirements Model," which describes what the Army wants its leaders to be, know and do. There are

Fran Murphy, passing on the D/2-34 guidon, wants his leaders to be smart, proactive and positive.

three meta-attributes—character, presence, intellect, and three meta-competencies—leads, develops, and achieves, with a number of additional, more specific items under each of those. (I assume the Army will update the front side of the Officer Evaluation Report to reflect these.) All in all, there are 23 attributes and competencies; actually, there are more than that because some of the items, such as "Army Values" and "Warrior Ethos," can be further broken down. Pulling from the 23-plus items in our doctrine, here are my top five for both my subordinates and my bosses: (1) gets results; (2) exercises sound judgment; (3) possesses integrity; (4) creates a positive environment/fosters esprit de corps; (5) develops others.

I'm pretty happy with those.

Edward Cappellano

C/2-108th IN and E/427 BSB in the 27th IBCT (NYARNG)

I read all of the above. What if someone has all of these competencies but is still not a good platoon leader or commander? What if the person is talented but not invested and is just killing time waiting for his next assignment? There has to be another factor. "Team oriented" comes close. I call it ownership, or investment. If a person with all of these competencies is not invested—has no sense of ownership in his unit—all the competencies do not matter.

Tony Burgess

Ed, what I'm hearing you say is that the quality you most want in leaders is for them to be "all in" (i.e., fully committed or invested).

Jeffery Jones

B Battery, 1-134th FA

I agree with this wholeheartedly. I've run across many talented leaders who lacked that one attribute, which I believe you hit right on the head. Great leadership attributes do not always make a person great, but the investment of energy (the blood and sweat) with an attitude of teamwork seems to always pay off. I'd venture to say that some of my subordinates who lacked many of the previously identified qualities but possessed this ownership you speak of turned out to be better in the long run.

Dana Riegel

HHC, 173rd BSB and the Greater Kansas City Recruiting Company-4G1

Subordinate: (1) ability to quickly gain situational awareness (2) takes initiative (3) honest.

Boss: (1) ability to quickly gain situational understanding (2) trusts subordinates (3) proactive (4) mentor.

In addition to these, both have to have heart and a passion for what they are doing. As mentioned by several contributors, leaders need to be "all in."

Chris Miller

HHB 1-7 ADA (Fort Bragg, N.C.)

Subordinate: (1) invested—in the Profession, him or herself, and his or her troops (2) aggressive (3) adaptive (4) physically fit (5) loyal.

Boss: (1) professional—in all matters and at all times (2) competent (exercised at the tactical level—versed at the

Kevin Hadley's soldiers (C/1-504 PIR) inspired him to be a role model, to provide leadership and to be tactically competent.

strategic and operational levels) (3) honest/loyal (4) humble (5) listens to the concerns and suggestions of others with genuine concern and interest.

I filled up an entire sheet of paper with different attributes. In rank ordering them, I found that I value them differently for subordinates and bosses. For example, I had "physically fit" listed as an attribute for both. This attribute, however, made it to my top five for the subordinate and not the superior.

Damian Green

B/501 FSB, 1AD DISCOM, in support of 1-1AD

Subordinate: (1) Do what I asked you to do, but don't do it in a vacuum (ask for input and feedback) (2) Think and provide the output of that thought in a usable format for the unit to consider (3) Once you do what I told you to do, do more; help the organization get caught up or even ahead.

Boss: (1) Provide iterative feedback on the projects that you asked my team to accomplish; don't wait until the end (2) Force me to face the problems that need to be tackled that I may be ignoring (3) Help me overcome organizational boundaries so that I can move forward or you can change your guidance (4) Line up opportunities to allow us to succeed.

Melissa Salamanca

C Co, 305th MI BN

Subordinate: (1) the ability to independently problem solve/research solutions (2) the ability to anticipate requirements/issues (3) the ability to communicate openly and honestly.

Boss: (1) the ability to communicate openly and honestly (2) trust and support (3) guidance and mentorship.

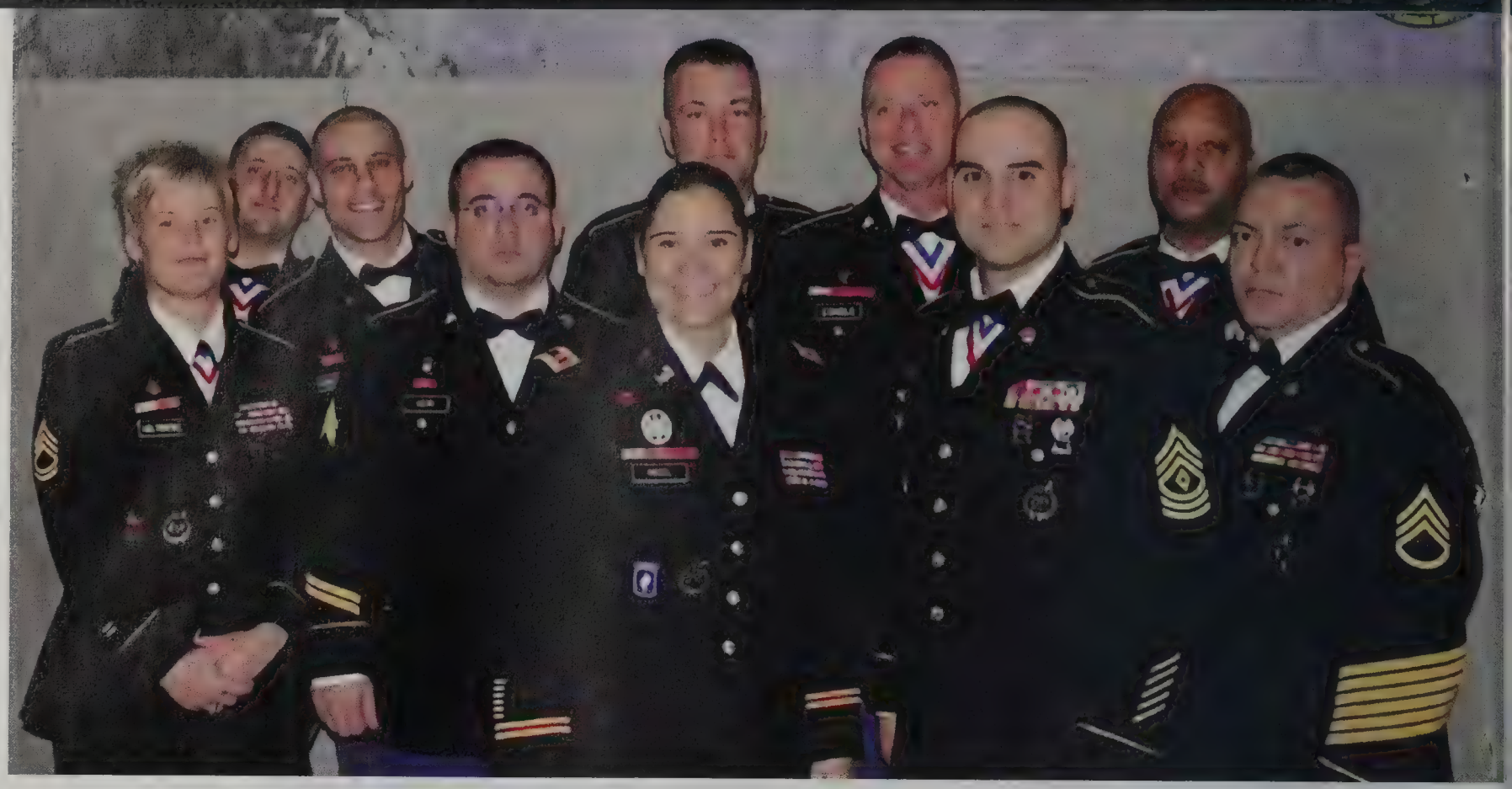
I would want a subordinate officer to be able to solve problems or look for the solutions independently because I may not have time to do so. Before problems or issues arise, it's important that my subordinate officers anticipate those issues or requirements to "get ahead" of them so we can be proactive instead of reactive. At all levels, communication is vital. The more informed I am, the better decisions I can make.

For a boss, not only would I want communication to be open and honest, but I would also want him/her to provide reasons for decisions, requirements, changes, etc. I can be much more credible in front of my subordinates if I understand why things are the way they are. I would also want my boss to trust the decisions I make and to back me up if the need arises. Finally, because my boss is more experienced than I am and because I will inevitably make mistakes, his/her guidance and mentorship are invaluable to my success in my current position and in the future.

Jill Davis

USARAF G4, CCC/MA OIC

Subordinate: (1) honest—tell it like it is (2) mission focused—accomplish what has to be done, but consider all things in getting to that end (3) committed—work until mission accomplishment to the best of your ability (4) perceptive—anticipate needs, requirements, outcomes, shortfalls, etc., impacting mission accomplishment (5) audacious—ability to think outside the box when everyone is stuck in the box (and to tactfully communicate it).



Dana Riegel (center), with her team, believes all leaders must have "a passion for what they are doing."

Nathan Wike (right), with his first battalion commander/mentor, LTC J.P. Moore, believes that leaders must actively develop their subordinates.

Boss: (1) communicator—tell me what has to be done by when, and let me know where I stand (2) mission focused—gear all activities toward mission accomplishment (control or prioritize activities that do not contribute to goal end state) (3) team builder—enforce, develop, encourage and/or allow school training, MTTs [mobile training teams], OPD [officer professional development], traditions, Challenge PT [physical training] (4) honest—tell it like it is (5) trustworthy—closed-door conversations remain closed-door; do things for the benefit of the organization.

My number-one attribute that I need from subordinates is for them to be honest. I make decisions (some that are major) based on their input. I believe Soldiers and NCOs are more likely to believe leaders who tell it like it is, whether good or bad. I need superiors to communicate what the mission or priorities are.

The difference in my attributes is based on levels of responsibility. The five attributes that I named for junior leaders are the building blocks for gaining credibility with their platoons. If I can ingrain those five attributes into my junior officers, they will earn respect from their NCOs, Soldiers and families. The next level of responsibility integrates the knowledge gained from the experiences that were learned as a junior officer. The superior leader capitalizes on the lessons learned to build the vision for the larger organization. The crucial responsibility of the superior leader is building the team and enabling the junior officer through developmental mentorship.

Walter Loyola

HHC, 117th Space Battalion, Colorado ARNG

My two lists are the same, but in a different order:

Subordinate: (1) integrity (2) mental agility (3) initiative/good judgment (4) organized (5) interpersonal skills.

Boss: (1) integrity (2) mental agility (3) organized (4) interpersonal skills (5) good judgment.

What Research Says

For 30 years, Jim Kouzes and Barry Posner have been asking people all over the world what they look for and admire in a leader. As reported in their book *The Leadership Challenge*, based on the input of 75,000 people, the qualities of a leader people willingly follow include "honesty, forward looking, competent, inspirational and credible." To read more about Kouzes' and Posner's work visit www.leadershipchallenge.com.

For me, the different levels of responsibility drive what's important. I believe all levels require integrity, which binds the rest of the qualities to each other—to do what's right regardless of the circumstance or whether anyone is watching. Mental agility is the ability to apply common sense and thinking out of the box as appropriate. We owe it to our bosses to take initiative and exercise good judgment in using mental agility to find solutions to problems and in finding ways to improve the organization. In turn, bosses owe it to their subordinates to have good judgment in terms of knowing when to step in (I am hesitant to say "when to micromanage") and to recognize good solutions. An organized leader provides structure, particularly in the form of clear guidance, allowing everyone to go in the same direction while employing initiative and mental agility. Interpersonal skills involve understanding people and being able to communicate. The boss has to communicate with more people as the level of responsibility grows. This is why "interpersonal skills" is higher on my top five for bosses than it is for subordinates.

Nathan Wike
HHC 210 BSB, 2/10 MTN (LI)

Subordinate: (1) common sense—must be able to analyze a given situation and craft a logical course of action (2) confidence—being able to stand up for oneself and one's decisions under both internal (self) and external (others) scrutiny (3) initiative—knowing the commander's intent and having the fortitude to carry out actions to further it in the absence of orders (4) introspection—the ability to objectively identify personal strengths and weaknesses and develop consequent means to maintain and/or improve (5) interpersonal—no matter the level or variant of rank, must be capable of integrating their skills and resources within a larger team in order to further mission accomplishment.

Boss: (1) integrity—sets the example for others to follow through personal and professional actions, and is willing to stand up for one's beliefs even in the face of adversity (2) intelligence—well versed in all relevant military skills and subjects and possesses the ability to synthesize knowledge and use it in a relevant, objective manner (3) managerial—recognizes the skills and attributes of others, listens to varying ideas and synchronizes efforts to achieve a common goal (4) humility—accepts criticism, acknowledges the abilities of others and gives proper credit when it is due (5) mentorship—molds and guides others to maximize their abilities and put forth the highest amount of effort possible.

My list is by no means conclusive. In reality all of these traits should be intrinsic to both subordinates and leaders. The major difference between the two is that a leader must be able to foster and encourage subordinates to become leaders themselves. One noticeable quality absent from my lists is "leadership." I do not believe leadership is a single trait in and of itself. Rather, I believe that a leader is the successful combination/summation of all of one's traits and abilities in order to motivate and inspire others.

* * *

This conversation is one of those that becomes valuable in direct proportion to the amount of energy you invest in it. As a quick read, it's OK but probably without impact. If, however, it serves as a catalyst for you to do the exercise for yourself and with your team, it has the potential to be meaningful. Imagine, for example, a future company commander investing some quality time in the process, bouncing it off respected leaders for feedback, and then using it with his or her team after taking the guidon.

You can take this conversation even deeper, for yourself and for your team: Given what you said you value most in a subordinate and boss, how would your current boss assess you as a subordinate? How would your current subordinates assess you as a boss? In other words, turn your own criteria around on yourself. Finally, how are you putting your "top five" into practice? The greater challenge is not to decide on your top five; rather, it is to act on them—to put them into practice.

If you are a currently commissioned officer, we invite you to join the conversation in the Company-Command forum (http://CC.army.mil).

Soldier Armed

JLTV Enters EMD

By Scott R. Gourley

Designed to replace approximately one-third of the Army's oldest unarmored High Mobility Multipurpose Wheeled Vehicles (Humvees), the Joint Light Tactical Vehicle (JLTV) incorporates the strengths of the Mine-Resistant, Ambush Protected (MRAP) vehicles, which the Humvee family of vehicles does not provide. JLTV is a joint U.S. Army and U.S. Marine Corps program with the Army designated as the lead service.

Although the Humvee was not initially designed for use as an armored combat vehicle, it was often used in that role in both Iraq and Afghanistan. In emphasizing the importance of the JLTV program, service leadership from both the Army and the Marine Corps emphasize that the new platform will be designed to fulfill that armored combat role, with capabilities to operate across the range of military operations and physical environments. Together with their companion trailers, they will provide improved mobility and protection for soldiers and marines.

In October 2008 the Army awarded three JLTV technology development (TD) contracts with the goal of helping to further define requirements, reduce technology risk and shorten the time frame for subsequent system development. TD awards were made to Lockheed Martin Corporation Systems Integration, BAE Systems Land & Armaments-Ground Systems and General Tactical Vehicles, a joint venture between AM General, LLC and General Dynamics Land Systems. The three contractor teams delivered prototype vehicles in May 2010; testing was completed in June 2011.

Those TD test results led to a number of requirements changes and program structural adjustments, and in January the government released its request for proposals for the engineering and manufacturing development (EMD) phase of the JLTV program. That request drew responses from six contractors and industry teams, and in August the Army announced Joint Light Tactical Vehicle EMD awards for three contractors: Lockheed Martin Corporation (Grand Prairie, Texas); Oshkosh Corporation (Oshkosh, Wis.); and AM General, LLC (South Bend, Ind.).

"We were very pleased with the robust industry response to the JLTV RFP," said Kevin Fahey, Program Executive Officer for Combat Support and Combat Service Support. "The source selection team worked diligently through the large volume of proposals submitted to ensure that the partners chosen for the EMD phase gave the services the best opportunity possible to take the next step in filling the critical capability gaps within the light tactical vehicle fleet."

"This award is a significant milestone that brings JLTV closer to fruition, and reflects very successful collaboration between the Army and Marine Corps," added LTG William Phillips, Military Deputy Director, Army Acquisition Corps, Office of the Assistant Secretary of the Army (Acquisition, Logistics and Technology). "Our teamwork will provide another much-needed capability to both soldiers and marines while keeping cost and requirements in line."

The EMD phase of the program is scheduled to last 33 months. Under the EMD contracts, the three industry teams will deliver 22 "full up" prototype vehicles, with vehicle deliveries starting 12 months after contract award. Those vehicles will then be used in an extensive government program of blast, automotive and user evaluation testing.

Kathryn Hasse, JLTV program director at Lockheed Martin, outlined the team's "purpose built vehicle," explaining the importance of its "proven/stable team" moving forward from the earlier TD phase.

"We had the luxury of starting with a clean sheet of paper and designing a vehicle to meet the warfighter's requirements, since we had the opportunity to participate in the JLTV program," she said.

Emphasizing the 160,000 total test miles accumulated on Lockheed Martin's platforms to date, she said, "Through government testing we've already proven that [we] can meet the

Lockheed Martin Corporation

Lockheed Martin's Joint Light Tactical Vehicle (JLTV) has logged 160,000 test miles.

The Oshkosh Defense JLTV has been in development since 2006.

government performance [requirements]—and that includes the enhanced blast performance ... As a result of government testing we know we enter EMD with a highly reliable vehicle."

Acknowledging that cost has been "a big discussion point over the last year or so," she added, "We have spent a tremendous amount of time optimizing our JLTV design for EMD and for production. We have significantly 'cost reduced' our TD design by eliminating exotic materials and optimizing the design itself for production. We really do have very great confidence in our ability not only to deliver very high-quality, reliable vehicles on the accelerated schedule that the customer has requested but we also have great confidence that we can achieve [an] aggressive average unit-production cost in production."

While not one of the earlier TD contractors, Oshkosh Defense emphasized the company's "significant independent research and development investments" that have contributed to the development of its JLTV solution since 2006.

In marking the EMD contract award, an Oshkosh announcement notes "a generational product development approach that aligned to rapidly evolving technical requirements. As a result, the Oshkosh JLTV delivers the latest automotive technologies, an advanced crew protection system, and a next generation TAK-4i™ independent suspension system to achieve JLTV performance at an affordable price. The Oshkosh JLTV is fully tested, ready for initial production, and meets or exceeds the requirements of the JLTV program."

According to the company announcement, "the Oshkosh JLTV solution, the Light Combat Tactical All-Terrain Vehicle, or L-ATV, offers an advanced crew protection system that has been extensively tested and is proven to optimize crew survivability. The L-ATV can accept multiple armor configurations, which allow the vehicle to adapt easily to changing operational requirements. The L-ATV also applies the Oshkosh TAK-4i™ intelligent independent-suspension system to provide significantly faster speeds when operating off-road, which can be critical to troops' safety."

AM General has dubbed its JLTV EMD platform the Blast Resistant Vehicle-Offroad (BRV-O). As a distinctly separate offering from the General Tactical Vehicle joint venture JLTV Eagle offering, an AM General release describes its BRV-O as being "based on more than a decade of AM General investments in research, development and testing for this next-generation light tactical military vehicle. Its mobility technology, matured to meet warfighter demands, accumulated more than 300,000 operational test miles and demonstrated high reliability and maintainability. BRV-O features a crew capsule and modular armor already proven effective in government-supervised blast testing. The BRV-O design can be readily adapted to future changes in U.S. military missions, enemy threats and new protection technologies as they emerge. BRV-O also features AM General's lightweight, fuel efficient and high performance engine and transmission powertrain; a self-leveling suspension system; a C4ISR backbone with open-standard networked architecture and clustered super-computing power; and other advanced components."

Although one contractor filed an initial protest against the EMD awards with the U.S. Government Accountability Office, that company subsequently withdrew its protest within one week. In addition, a company that did not receive an EMD award and wishes to proceed toward a production contract source selection at its own risk—and at its own expense—has informed the government of its intentions to pursue that option within 30 days of the EMD contract award notifications. ★

AM General, LLC

AM General's BRV-O is adaptable to future military mission changes.

AUSA Sustaining Member Profile

Phantom Products

Corporate Structure—Director of Military and Government Products: Victoria McDermott. Corporate Headquarters: 474 Barnes Blvd., Rockledge, FL 32955. Telephone: 888-533-4968. Website: www.phantom-lights.com.

Phantom Products is a U.S. owned and operated manufacturer of cutting-edge, LED-based covert military lighting. It is a regular supplier to most large original equipment manufacturer vehicle builders, and its lights are found throughout all branches of the military and in the Department of Homeland Security. Those not familiar with Phantom's proud history in covert military lighting will note that Phantom has a unique corporate mission: to design and manufacture high-technology, covert lighting for the U.S. military and law enforcement communities without making them available to the enemy. Toward this end, Phantom purposefully has no worldwide network of suppliers, no impersonal distributor network and no separate divisions for its varied tactical lighting products. Phantom excels as a team of experienced designers and a dedicated manufacturing staff in Rockledge, Fla. Each contract is unique and each product handled as if someone's life depends on it—because it does. Every component of every product is either manufactured in the plant or sourced from American manufacturers. The goal is to protect Phantom's superior technology, putting it only in the hands of those who protect our liberty and freedom.

Vehicular Lighting

While the McDermott family started making lighting products in 1943, the line of covert lighting emerged in the 1980s when the U.S. Army requested contractor help to design covert yet map-friendly lighting for the multiple launch rocket system (MLRS). Five years of testing—and multiple patents later—the Phantom Map Light was approved by the Human Engineering Laboratory at Fort Bliss, Texas. Part of the testing included field reviews, and soldiers in those vehicles went out of their way to document the light's gentleness on their "night eyes" and the clarity it provided for map reading.

This advancement was significant because prior lighting systems used an incandescent bulb and a filter to dull down the light output. The new Phantom light went beyond that old system to actually manipulate the light waves emitted so that they were restricted to a specific spectrum of light. This made the lights hard to detect with night-vision devices. The specialized emission coupled with other patented features added a level of security to the MLRS never thought possible. With no armament protection on that vehicle, it gave the soldiers operating it security from enemy eyes. In addition, the Phantom lights were color-accurate, so map reading was clear. From this first vehicle, Phantom's lights have been included in a range of others including the HIMARS, MRAP, MEV-Stryker, M-ATV, and the new DASH ambulance.

Personal Lighting

Of course, a lighting system this covert was destined to be converted to a handheld version for boots on the ground. In 1990, with input from the special operations community, the original Phantom Warrior flashlight emerged. It was initially—and still is today—the only light designed to keep a soldier covert on the battlefield. While other companies try to make the brightest lights, Phantom Products takes the opposite approach. Phantom lights give the user just enough of the right light to get the job done without making him or her a target for the enemy. In addition, the mentality of "keep it simple stupid" requires Team Phantom to use commonly available batteries—AA and AAA sizes—in its portable lights so that battery resupply is fast and cheap. The Phantom Warrior lights are so efficient that when they deploy with Army medics (issued to them beginning in 1990) one set of the four AA batteries generally lasts throughout the entire deployment, keeping soldiers covert and functional.

The critical nature of covert ground lighting also attracted the attention of Army aviation. The danger that aviation units can encounter on the ground means their equipment has to be varied for all contingencies. Air Warrior assigned a National Stock Number to the newly upgraded Phantom Warrior Tactical Lighting System (TLS) and made it an approved flashlight for Army aviation. (The Naval SOSI also tested and approved this light.) The Phantom Warrior TLS has a range of features that includes preflight inspection lighting, in-flight lighting and infrared rescue lighting, as well as a series of flash patterns. In May 2012, Phantom Products introduced the new ResQ Lens system that turns the covert light into an overt beacon, thus eliminating the need for crew members to carry an additional safety strobe.

Equipment Lighting

The same covert features are employed in Phantom Products' tactical operations center (TOC) and shelter lighting. Lights should be as durable as the tents themselves, and that's the case with the Phantom system.

They are slim, rugged, and easy to pack and unpack. In addition, there is no "green glow" from TOCs employing Phantom lights because of the specific features that restrict light output. Thanks to units with the 82nd Airborne Division, Phantom TOC lights illuminated Iraqi palaces in areas that were served with sporadic electricity. The fact that the lights are 24 volts direct current offers the unique flexibility to run off of a generator, a vehicle, or a single channel ground and airborne radio system at any time.

Movement and Specialty Lighting

In early 2002, the special operations community stepped forward with a project to reduce cost and weight for setting up remote landing zones, pickup zones, drop zones and forward area refueling points. Working with the Defense Advanced Research Projects Agency, Phantom designed a small, remotely controlled powerhouse. The patented optic system of the Phantom AZL-15 gives pathfinders and combat control teams a lightweight portable system that can be used to set up a 5,000-foot landing zone quickly and efficiently using only AA-size batteries.

Not everything is covert at Phantom Products; sometimes soldiers have to be seen. Recently, the engineering team at Phantom has been finishing the Phantom Stormlight for National Guard and Reserve troops. This rapidly deployable system attaches to most military vehicles so when units are responding to Military Support for Civilian Authorities/Defense Support to Civil Authorities missions, soldiers are not hurt by civilians who cannot see the dull paint and dim lights on their vehicles. It does not change the structure of the vehicle and can be installed in 10 minutes with three tools.

Light Solutions

Soldiers approach us with lighting problems, and it is our job and privilege to provide the solutions.

The McDermott family has been protecting our military since the 1940s, starting with marking lights used in World War II to guide ships past Japanese mines, to today's multicolor array, remote-activated Phantom AZL-15 lights. When you need to see, and need to remain covert and tactical, the only choice is a Phantom light.

Phantom Products has been a Sustaining Member of AUSA for more than 25 years.

Reviews

'Masterpiece of Historical Scholarship'

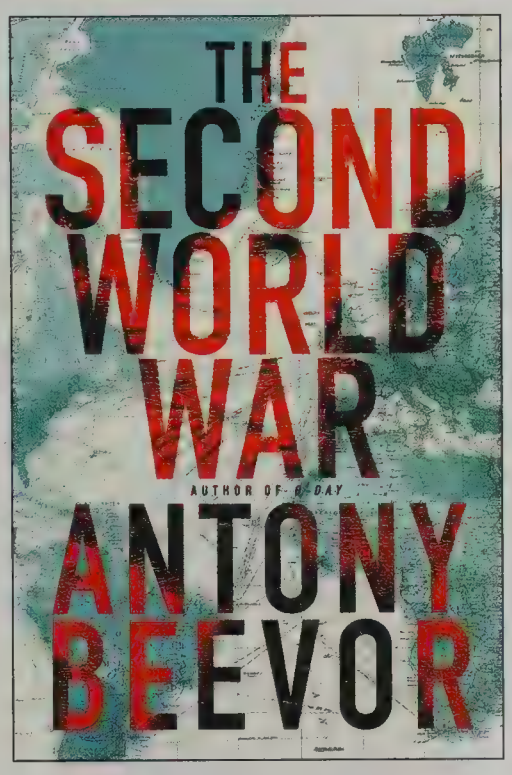
The Second World War. *Antony Beevor. Little, Brown and Company. 863 pages; black-and-white photographs; maps; notes; index; $35. Publisher website: www.hachettebookgroup.com/publishing_little-brown-and-company.aspx.*

By COL Kevin W. Farrell
U.S. Army retired

Rarely in recent years has a book on World War II forced a fundamental reappraisal of the war as a whole, but Antony Beevor's *The Second World War* certainly makes a case for it. As knowledge of the most costly war in human history fades from living memory—a war that left between 60 to 70 million people dead—reassessment correspondingly becomes more essential. With engaging prose and a remarkable ability to clarify and simplify massive and complex events, Beevor has once again demonstrated why he is a preeminent historian on the subject. Two previous works, *Stalingrad: The Fateful Siege, 1942–1943* and *Berlin: The Downfall 1945*, established him as a leading scholar on the war; both books remain definitive accounts. As before, Beevor's forte is his ability to address the grand sweep of monumental campaigns while never forgetting the individual human experience. Perhaps his only contemporary peer in this regard is fellow British historian, Max Hastings.

Coherently and chronologically organized into 50 compact chapters, this lengthy book is actually a quick read. In addition to the great campaigns and important strategic decisions familiar to the casual World War II student, Beevor explores lesser known, but still crucial, events. Throughout every chapter he alternates between grand strategy, operational concerns and tactical fighting. A prime example is "Chapter 43: The Ardennes and Athens: November 1944–January 1945," where the focus is not only the famous German Ardennes Offensive of December 1944 (better remembered as the Battle of the Bulge) but also British airborne operations in Greece to prevent a communist takeover in the midst of the Greek Civil War.

Perhaps the most novel idea in the book is the conscious decision to date the start of the war not with the German invasion of Poland on September 1, 1939, or even the Japanese invasion of China on July 7, 1937, but rather with the so-called Nomohon Incident (termed the Battle of Khalkin Gol by the Soviets) of May 12, 1939. Beevor details how Soviet efforts to thwart Japanese aggression in the Soviet sphere in 1939 directly affected the outcome of the war and demonstrates that Khalkin Gol is the primary event linking the outcomes of the Pacific and European theaters of war. As a result of this defeat, Imperial Japan redirected its aggression to the South Pacific against French, Dutch and British colonies, and ultimately American interests. Japan's subsequent refusal to join Hitler's war against the Soviet Union allowed Stalin to concentrate his assets against Germany, while the industrial might of the United States was brought to bear against both Nazi Germany and Imperial Japan. The Axis powers were therefore doomed.



In Beevor's view, the Sino-Japanese conflict is "a missing section in the jigsaw of the Second World War." He argues convincingly that Japanese aggression and militarism led directly to the widening of the war, observing that the struggle began well before the fighting in Europe, and lamenting that "the conflict in China has often been treated as a completely separate affair, even though it saw the largest deployment of Japanese ground forces in the Far East, as well as the involvement of both the Americans and the Soviet Union." In particular, "Chapter 4: The Dragon and the Rising Sun: 1937–1940" shows Beevor at his best: The strategic considerations of China, Japan and the Soviet Union are interwoven with important battles and campaigns at the operational level while the situation, motivation, and suffering of ordinary soldiers and civilians are movingly portrayed. Somewhat surprisingly, Chinese Nationalist leader Chiang Kai-shek is presented sympathetically as "a tireless modernizer … inspired by genuine idealism." Beevor goes on to describe in gut-wrenching detail Japanese depredations committed against the Chinese population including mass rape, forced prostitution, bayonet practice on civilian prisoners, wholesale murder and widespread torture. The eyewitness account of a German businessman provides fitting commentary on the Japanese conduct in Nanking: a "crudity, brutality and bestiality that bears no comparison except with the hordes of Genghis Khan."

Well versed in the various historical debates related to the war, Beevor does not mince words and weighs in clearly with his opinions, ranging from the effectiveness of the Allied strategic bombing campaign to the Holocaust. On the latter topic in particular, he is quite clear. Correctly linking Adolf Hitler's racial ideology to the fatally flawed Nazi military strategy, Beevor suggests mass murder was not Adolf Hitler's

original intention, but rather that the chaotic and competitive administrative structure and ruthless personalities of the Third Reich worked toward the policy over time. Following a graphic passage describing ghastly medical experiments committed by Nazi physicians, Beevor observes, "Such a mentality in a doctor may be beyond our comprehension, but as a traumatized Vasily Grossman observed after describing the horrors of Treblinka: 'It is the writer's duty to tell this terrible truth, and it is the civilian duty of the reader to learn it.'" Consistently, Beevor follows Grossman's advice, and not just with the Holocaust, but also regarding the plight of Allied prisoners of war whom the Japanese subjected to torture and even as a food source for a cannibalistic Japanese army in the waning months of the war.

Despite occasional minor missteps—for example, the notorious *Leibstandarte Adolf Hitler* is termed an SS division during the invasion of Poland (it would not become a division until 1941)—and the absence of conventional endnotes, the book is essential reading for anyone seeking to learn more about World War II and its consequences. Although not every reader will agree with its conclusions, the book is always captivati and informative. Beevor covers t broad sweep of grand strategy and t poignant details of ordinary people l ing through the greatest conflagrati the world has known. It is hard imagine how he will ever top this ma terpiece of historical scholarship.

***COL Kevin W. Farrell**, Ph.D., is chief military history at the U.S. Milita Academy. He commanded a combin arms battalion in Iraq. His most rece book is* The Military and the Mona chy: The Case and Career of the Dul of Cambridge in an Age of Reform.

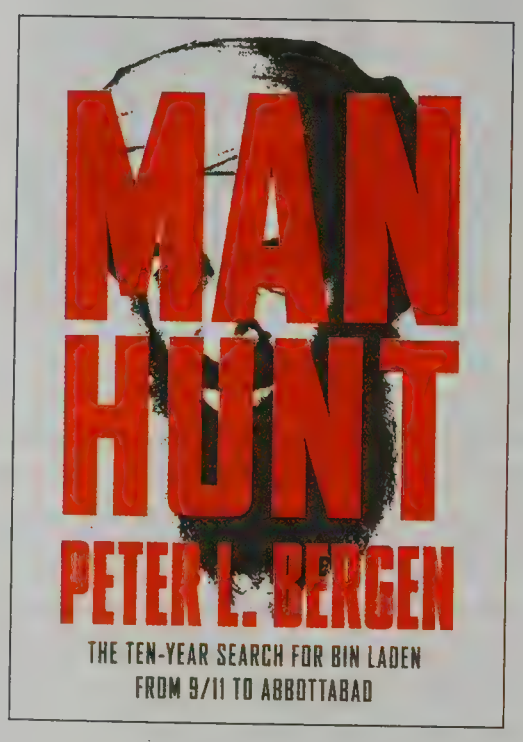
Lessons from the Hunting Season

Manhunt: The Ten-Year Search for Bin Laden from 9/11 to Abbottabad.
Peter L. Bergen. Crown. 359 pages; index; notes; bibliography; color photographs; $26. Publisher website: www.crownpublishing.com.

By James Jay Carafano

There are few journalists working the terrorist beat I respect more than Peter Bergen. He was on the story of Osama bin Laden long before 9/11. He has written three well-regarded and informative books on al Qaeda: *Holy War, Inc.: Inside the Secret World of Osama bin Laden, The Osama bin Laden I Know,* and *The Longest War: The Enduring Conflict Between America and al-Qaeda.* No one is better suited to write bin Laden's last chapter, the story of the global manhunt documented in *Manhunt: The Ten-Year Search for Bin Laden from 9/11 to Abbottabad.* It is no surprise that Bergen delivers a solid, compelling and informative narrative of both the al Qaeda mastermind's activities after the terrorist attacks on New York and Washington, D.C., and the efforts by the U.S. government to hunt him down.

If *Manhunt* reads like the latest Brad Thor novel, that's not because he has embellished his topic. Bergen isn't hyping the story; modern thriller authors like Thor and Tom Clancy, without apology, crib from real-world headlines. When it comes to the business of tracking down terrorists, life, it seems, is not stranger than fiction. On the other hand, while *Manhunt* reads like the inside story of how America got bin Laden, it likely is not the whole story. Like any complex historical event, there are bound to be more facts, revelations and interpretations to follow. Indeed,



Bergen looks to be on the front of a tsunami of new books on the topic.

Perhaps what is more important than what *Manhunt* tells us about what happened from the bright cloudless morning of 9/11 to the pre-dawn hours over bin Laden's compound in Abbottabad, is the opportunity to reflect on lessons for the future of fighting terrorism. It is hard to ignore how far U.S. special operations capabilities have come since Operatic Eagle Claw, the disastrous 1980 faile rescue of U.S. hostages in Iran.

In describing Neptune Spear, the rai that finally got bin Laden, Berge draws particular attention to the rapi evolution of the Joint Special Opera tions Command (JSOC) over the la few years. "In the decade after 9/11, Bergen notes, "JSOC mushroome from a force of eighteen hundred t four thousand, becoming a small arm within the military," and it was a forc that delivered. Bergen writes tha JSOC's jackpot rate, "the rate of mis sions in which Special Operation forces captured or killed their targets i Afghanistan or Iraq—soared from 3 percent to more than 80 percent." Clearly special operations forces (SOF) have be come a force to be reckoned with. In ad dition to the expansion of SOF, Berge notes that a network of CIA and FBI ana lysts, interrogators and field operative played important roles as well.

It took years to build the capabilitie to shut down these global terrorist net works. What happens to these asset now that bin Laden is dead and Wash ington is facing a budget crunch? While the appetite for covert operations still seems insatiable, it is an open question if there is the will to sustain covert capabilities so they are ready for the next bin Laden-like figure.

Without the resources to maintain trained and ready forces, support cur-

ent missions and prepare for the future, military forces go hollow. In some ways, covert assets are more at risk, since the forces and their activities are out of sight, signs of creeping declines in readiness are harder to spot, and there is more to worry about than just drones and Seal Team Six. Conventional forces get scant mention in *Manhunt*, but they were the backbone and launching pad for special operations in Iraq and Afghanistan. One could not have happened without the other. Gutting conventional forces is just another route to hollowing out Special Forces by a different path.

In *Manhunt*, Bergen rightly points out that Adm. William H. McRaven, the commander of U.S. Special Operations Command—who oversaw the bin Laden raid—once "wrote the book" on how to get special warfare right. McRaven's *Spec Ops: Case Studies in Special Operations Warfare: Theory and Practice* (1995) lays out the principles of special operations. McRaven calls one significant principle relative superiority. This he defines as "a condition that exists when an attacking force, generally smaller, gains a decisive advantage over a larger or well-defended enemy." McRaven goes on to make this critical observation: "Once relative superiority is achieved, it must be sustained in order to guarantee victory." In short, special operations—like the Abbottabad raid—are truly special. Executed at the right time and place, they can surprise the enemy and accomplish an extremely valuable mission—be it rescuing hostages or bagging bin Laden. When faced with a large, well-defended enemy or persistent, dispersed threat, however, SOF cannot do it all. Indeed, *Manhunt* concedes, SOF is not a silver bullet.

Another issue *Manhunt* implicitly raises is concern over the future of strategic intelligence. In the end, a lot of what the CIA contributed to the operation looked a lot more like what the FBI does every day. Are CIA operational activities outpacing the value of the other services the agency provides? Can the agency keep up with the global nature of these activities—the different languages, operational settings and so on? How do the actions of hunting down bad guys balance out with Langley's role in providing strategic intelligence and early warning? Where do we go now that bin Laden is gone?

There doesn't seem to be a better time to have a serious discussion about the future of strategic intelligence.

__James Jay Carafano__ is director of the Heritage Foundation's Allison Center for Foreign Policy Studies.

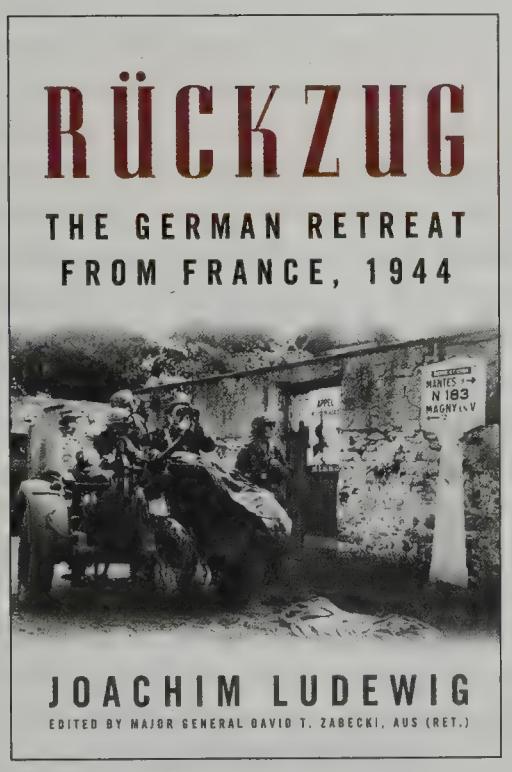
German High Command in 1944

Ruckzug: The German Retreat from France, 1944. *Joachim Ludewig. University of Kentucky Press. $28. 435 pages; black-and-white photographs; maps; index; notes; bibliography. Publisher website: www.kentuckypress.com.*

By COL Gregory Fontenot
U.S. Army retired

Joachim Ludewig's *Ruckzug: The German Retreat from France, 1944* is a recent addition to the outstanding work done by the German army's Military History Research Institute in Potsdam. The publication of these "official histories" of the German army in World War II adds depth and context to both the history and historiography of World War II. *Ruckzug* provides insight into the operational and strategic decision making in the German high command in the late summer and fall of 1944.

Ludewig makes several central arguments, all of them from the perspective of examining decisions by the German commander in the west based on the assessments that he and his subordinates made. Thus what field marshals Gerd von Rundstedt and Walter Model knew and what they did about it are the chief focus, but Erwin Rommel, Gunther von Kluge, Johannes Blaskowitz and other senior German commanders in theater are also considered. *Ruckzug* is a classic military history in



that Ludewig aims to address gaps in the record but does so on the basis of critical analysis of, as he puts it, "the planning and the combat actions of the time within their geographic context, and above all from the German perspective." In this he succeeds, producing a lucid and clear-eyed criticism of decisions made on both sides.

By the summer of 1944, Germany's strategic position had declined to the point that little could be achieved that would alter the outcome. Hitler's grand scheme had failed once and for all at Kursk in 1943 and at sea in the battle for the Atlantic. What remained feasible, at least in Hitler's mind, was the defense of Fortress Europe. In the fall of 1943 following the end of his dreams in Russia, Hitler shifted his main effort west in response to the looming threat of a cross-channel invasion. The Allies had assembled nearly 40 divisions in Great Britain with the U.S. Army marshalling another 40 in the United States. Of these, eight Allied divisions landed in Normandy on June 6 opposed by six German divisions. Although the Allies did not enjoy an immediate or decisive advantage in numbers of ground troops, they did enjoy such an advantage in the air. In all, the Allies fielded some 8,000 aircraft against 400 to 500 German aircraft.

Ludewig highlights a number of problems and issues confronted by the German command in the west. Many

of them have application today. Generating forces, visualizing outcomes, designating main effort, sustaining forces and reconstituting units in combat were just a few of the considerations that senior officers on both sides had to undertake in planning and execution. The Germans and the Allies had to fight "among the people." The French Resistance, while not decisive, certainly proved an irritant to the Germans while the Allies caused the death of many French civilians as "collateral damage." All of these are issues for contemporary soldiers as well. Taken together, these cover the bulk of variables or problems associated with exercising operational and even strategic command.

According to Ludewig, the senior German commanders in the west—including Model, von Rundstedt and most of their subordinates—excelled at thinking through these operational problems and achieving reasonable solutions. On the other hand, he finds the influence of Hitler singularly unhelpful and contends that Hitler made a difficult situation worse by his interventions. His account of how Model and von Rundstedt dealt with the competing requirements of the battlefield coupled with the demands of the German high command, and often Hitler himself, is riveting. He disparages the so-called Miracle in the West because it occurred not only as a consequence of the professionalism of the German army but also because of errors made by the Allies and by what Carl von Clausewitz would have described as the culmination driven by the Allied armies outrunning their logistics.

Ludewig is critical of then-GEN Eisenhower in particular, asserting what many have: that Eisenhower failed to recognize opportunity and to designate and sustain a main effort. This is not a new idea but one that Ludewig explores more carefully than most. Like most critics he really does not offer a clear path that Eisenhower should have seen. That is the rub in the single axis versus broad front debate. Both General Bernard L. Montgomery and GEN Omar Bradley favored a single axis as long as one of them led it. Given his chance, Montgomery made little use of it at Operation Market-Garden. In any case, such speculation is of less interest than whether Eisenhower should have clearly articulated a main effort. Equally important, by late September the Allied failure to open more ports, Antwerp in particular, made it unlikely that the Allies could have sustained any focused effort deep enough to have made a difference.

Ludewig's analysis of German decision making is far better as it reflects thorough use of German documents and other contemporary sources. Ludewig demonstrates that Model acted courageously and decisively from the time he replaced Kluge. For example, Model effected early enough decisions to offset, to some extent, the impact of Allied airpower. By contrast, in June, July and early August decisions often could not be executed because they were taken too late to move units in the face of Allied control of the air. The Germans also managed to reconstitute forces and bring them into the fight just long enough to delay Allied pursuit to buy time to develop some defenses in greater depth. Reequipping units and finding the means to bring new units up illustrates the excellence and even the desperation of the German army in the summer of 1944.

The survival of many of the German formations assigned to the south of France is perhaps the most remarkable feature of the Miracle in the West. Elements of two field armies composed of seven corps and 16 divisions under the command of General Blaskowitz conducted a fighting withdrawal from the south of France following the invasion of the French Mediterranean coast. General Blaskowitz's troops achieved this before they could be cut off by the right wing of Bradley's 12th Army Group. The German efforts both in Blaskowitz's army Group G and those by remaining units of German army Group B that survived the Falaise Gap were remarkable. Ludewig recounts the decisions and, where possible, the thinking of the operational and tactical commanders with clarity.

Ruckzug is a first-rate account of the campaign in France from assault ashore through October of 1944 and the stabilization of the German positions in the west. Ludewig's arguments are sustained by the evidence in all but one case. He is not particularly convincing in his criticism of Eisenhower, but that is not his focus nor should it have been. His assessment of the U.S. Army's relative lack of skill is not surprising, even if it does sting. While it is unlikely that many will find sympathy with Hitler's minions, their story is nonetheless compelling. They fought with courage and often with great skill under difficult circumstances, and they were generally well led.

***COL Gregory Fontenot**, USA Ret., commanded a tank battalion in Operation Desert Storm and an armor brigade in Bosnia. A former director of the School of Advanced Military Studies, he is coauthor of* On Point: The U.S. Army in Operation Iraqi Freedom *and is director of the University of Foreign Military and Cultural Studies.*

Varied Fare

Valor In Vietnam 1963–1977: Chronicles of Honor, Courage, and Sacrifice. *Allen B. Clark. Casemate. 288 pages; glossary; index; black-and-white photographs; $29.95. Publisher website: www.casematepublishing.com.*

The Vietnam War is now fading from the collective memory of our military as our wars in Afghanistan and Iraq have created an entirely new generation of veterans with their own experiences. At the U.S. Army's Command and General Staff College, many of the student officers I teach—a number with multiple tours to Iraq and Afghanistan—see little relevance in studying what their fathers and grandfathers did in Vietnam. In fact, their lack of interest and knowledge of Vietnam is stunning. Because they generally don't know what their fathers and grandfathers did in Vietnam, they are under the impression that what we have done in Iraq and Afghanistan is completely and totally new. Nothing could be further from the truth.

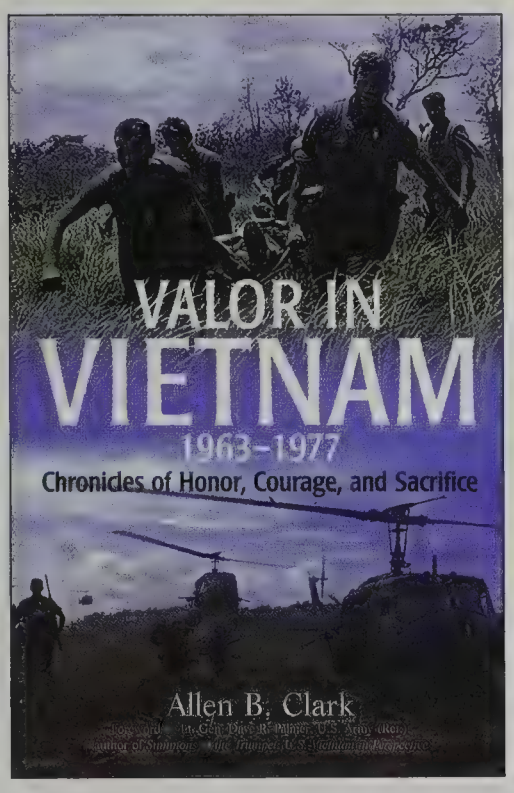
STATEMENT OF OWNERSHIP, MANAGEMENT, AND CIRCULATION
(Required by 39 U.S.C. 3685)

1. Title of publication: ARMY.
2. Publication No.: 0004-2455.
3. Date of filing: September 27, 2012.
4. Issue Frequency: Monthly.
5. No. of issues published annually: 12.
6. Annual subscription price: $34.
7. Complete mailing address of known office of publication: 2425 Wilson Blvd., Arlington, Va. 22201-3385.
8. Complete mailing address of the headquarters or general business office of the publisher: 2425 Wilson Blvd., Arlington, Va. 22201-3385.
9. Full names and complete mailing address of publisher and editor: Publisher: Association of the U.S. Army, 2425 Wilson Blvd., Arlington, Va. 22201-3385; Editor: Mary Blake French, 2425 Wilson Blvd., Arlington, Va. 22201-3385. Managing Editor: Laurence Moffi, 2425 Wilson Blvd., Arlington, Va. 22201-3385.
10. Owner (*If owned by a corporation, its name and address must be stated and also immediately thereafter the names and addresses of stockholders owning or holding 1 percent or more of the total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a partnership or other unincorporated firm, its name and address, as well as that of each individual, must be given. If the publication is published by a nonprofit organization, its name and address must be stated*): Association of the U.S. Army, 2425 Wilson Blvd., Arlington, Va. 22201-3385. Membership organization—no stockholders.
11. Known bondholders, mortgagees, and other security holders owning or holding 1 percent or more of the total amount of bonds, mortgages or other securities (*if there are none, so state*): None.
12. For completion by nonprofit organizations authorized to mail at special rates (*DMM Section 423.12 only*). The purpose, function, and nonprofit status of this organization and the exempt status for federal income tax purposes:
☒ Have not changed during preceding 12 months ☐ Have changed during preceding 12 months
(*If changed, publisher must submit explanation of change with this statement.*)
13. Publication name: ARMY.
14. Issue date for circulation data below: September 2011.

15. Extent and nature of circulation ASSOCIATION	*Average Number Copies Each Issue During Preceding 12 Months*	*Actual Number Copies of Single Issue Published Nearest to Filing Date*
A. Total number of copies (*net press run*)	68,495	62,927
B. Paid circulation (*by mail and outside the mail*)		
1. Mailed outside-county paid subscriptions stated on PS Form 3541. (*Include advertiser's proof copies and exchange copies*)	62,825	59,385
2. Mailed in-county paid subscriptions stated on PS Form 3541. (*Include advertiser's proof copies and exchange copies*)	—	—
3. Paid distribution outside the mails including sales through dealers and carriers, street vendors, counter sales and other paid distribution outside the USPS	880	—
4. Paid distribution by other classes of mail through the USPS	—	—
C. Total paid circulation (*sum of 15B [1], [2], [3] and [4]*)	63,705	59,385
D. Free or nominal rate distribution (*by mail and outside the mail*)		
1. Free or nominal rate outside-county copies included on PS Form 3541	1,187	1,160
2. Free or nominal rate in-county copies included on PS Form 3541	—	—
3. Free or nominal rate copies mailed at other classes through the USPS (e.g. First-Class Mail)	—	—
4. Free or nominal rate distribution outside the mail (*carriers or other means*)	1,053	1,375
E. Total free or nominal rate distribution (*sum of 15D [1], [2], [3] and [4]*)	2,240	2,535
F. Total distribution (*sum of 15C and 15E*)	65,945	61,920
G. Copies not distributed	2,550	1,007
H. Total (*sum of 15F and 15G*)	68,495	62,927
I. Percent paid (*15C/15Fx100*)	96.60	95.91

I CERTIFY all information furnished on this form is true and complete.
(*Signature and title of editor, publisher, business manager, or owner*)
s) *Mary Blake French*
Editor in Chief
September 27, 2012

Allen Clark has bridged the "military generation gap" with his outstanding book *Valor In Vietnam 1963–1977*. He provides the generational link through the stories of a number of veterans who pioneered some of our modern combat techniques. A number of conventional and counterinsurgency tactics, techniques and procedures used today were originally developed during the Vietnam War. These have been relearned in Iraq and Afghanistan. Clark uses pithy and relevant lessons learned at the small-unit level and entitles them: Combat Leadership Lessons. For the most part, these combat leadership lessons are directly applicable to small-unit actions today. They aren't revelations, just time-proven basics that many soldiers relearn from combat experience. For example, Combat Leadership Lesson #2 says, "Tactical decisions should be left to the ground commander," advice that might have been best heeded at the near-disaster at Ganjgal, Afghanistan, in 2009.



A former soldier, Clark gleaned his stories from relationships developed with fellow Vietnam veterans of all service branches, friendships established during his stint working for the Department of Veterans Affairs. Some of the stories, such as "A Ranger's Ranger," might well be considered by the Army today as it begins its drawdown of forces and is looking for ways to cut personnel—including those with waivers for pre-induction legal problems. SSG Patrick Tadina's incredible story of heroism and duty belies the fact that he had been crossways with the law and had been in reform school before enlisting. His service in Vietnam during five back-to-back tours places him in a special category of warriors. I am awed reading what he did. Tadina redeemed himself multiple times by courageous acts of selfless service to our country, and he is deservedly enshrined in the Ranger Hall of Fame at Fort Benning, Ga.

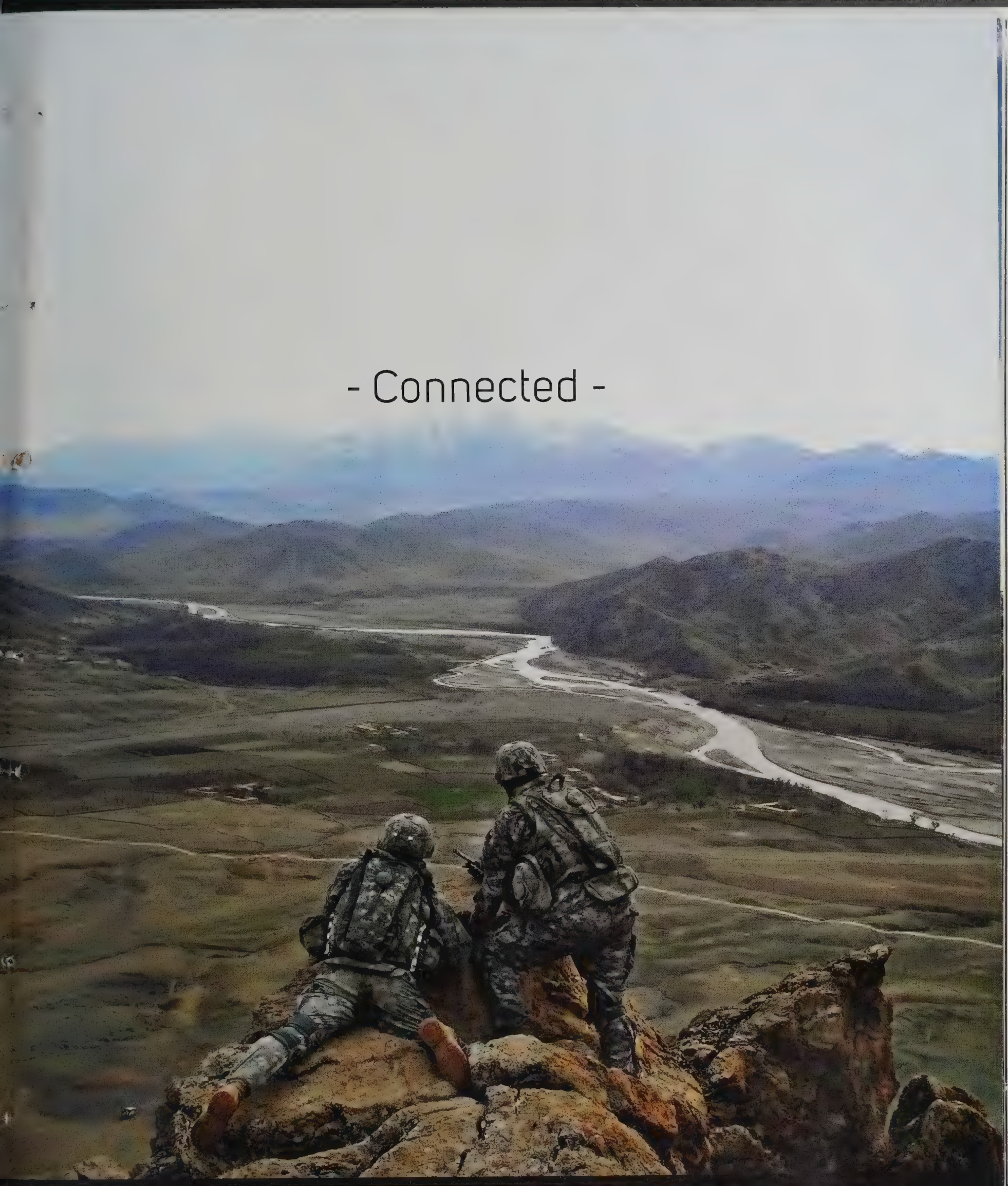
Some stories in the book are just too good to be true. The phenomenal story of Nguyen Thi Kim Cue—later Mrs. Ron Humphrey—is a bittersweet saga of how love in war perseveres against the odds. Cue and Humphrey, a young CIA psychological operations specialist advisor, eventually married, but when South Vietnam fell, she was unable to leave. Clark ends the book with the extraordinary part of the story as a tribute to this extraordinary couple's perseverance.

Clark tells stories in largely chronological order regardless of subject, and they generally flow from the beginning of substantive American involvement until the end, in May 1975. Each chapter ends by introducing the entry into Vietnam of the next chapter's events, creating an interesting thread of continuity.

I highly recommend this book for all military leaders. Younger military readers will not be disappointed in the legacy of bravery and courage in demanding, trying and difficult circumstances American servicemen labored under in Vietnam. Indeed, our brave, young soldiers today are descendants of the Vietnam generation and are likely to learn that the more things change, the more they remain the same. This is not only a tremendous tribute to our Vietnam veterans; it is a great book to inspire our future warriors. With its combat leadership lessons, it provides an excellent link to current battlefield tactics, techniques and procedures.

—LTC Edwin L. Kennedy Jr., USA Ret.

NOVEMBER ELEVENTH
TWENTY TWELVE
VETERANS DAY
HONORING ALL WHO SERVED
WWW.VA.GOV



Connecting you to a single network – anytime, anywhere. That's our top priority. We are delivering the systems and products you need to safely and effectively complete your mission.

www.gdc4s.com

GENERAL DYNAMICS

©2012 General Dynamics. All Rights Reserved. U.S. Army photo by Staff Sergeant Adam Mancini

HARRIS
TRIBAL LEADER
INTEL
IED
AMBUSH
LIVE UAV VIDEO FEED
Search
COVERT
Carry Anywhere.
Connect Everywhere.
HARRIS
assuredcommunications
The Harris RF-3590 Tablet—the only tablet built specifically for today's military operations. With just a touch, it lets you access a wideband network and share real-time information—when, where, and how you need to. Learn how this lightweight, ruggedized tablet can deliver critical information in support of your missions' success: harris.com/tablet
See it in action.
harris.com

cation Periodicals
05 UNC
2, no. 12 (2012)
A

The Magazine of the Association of the United States Army

ARMY

December 2012 www.ausa.org $3.00

**********AUTO**ALL FOR ADC 604
11639 20130531 20121201
ACQUISITONS DEPT.C03335933 0001
ACQUISITONS DEPT.C03335933 00175S
1406 W GREGORY DR P000006
URBANA IL 61801-3607 01:025289

AH-6

ARMED AERIAL SCOUT

ONE SCOUT LEADS THE PACK.

The AH-6 Light Attack/Reconnaissance Helicopter offers superior capability for the Army's Armed Aerial Scout mission. The most advanced integrated cockpit. Commonality with the Army's Apache Block III helicopter. Flexible weapons configuration with four pylon stations. Networked, including UAS connectivity. And with a full mission load, it's demonstrated hover-out-of-ground-effect above 6k/95° F. Capability ahead of the pack. That's AH-6 AAS.

BOEING

ARMY

MAGAZINE

DECEMBER 2012
VOL. 62, NO.12

PUBLISHED BY THE ASSOCIATION OF THE U.S. ARMY

www.ausa.org

FRONT & CENTER

Our Future Army
By GEN Frederick J. Kroesen, USA Ret.
Page 17

Army's Forward Thinking Finally Gets Energized
By Richard Hart Sinnreich
Page 18

CSM Basil L. Plumley, USA Ret., 1920–2012
Page 20

Too Quiet on the Western Front
By COL Gary C. Howard, USAR Ret.
Page 23

Putting Military Retirees Back to Work
By LTC Richard A. Vargus
Page 25

Getting Our PT Program Back in Shape
By 1LT Ryan Patrick Hovatter
Page 27

Medical Simulation
By Scott R. Gourley
Mannequins, human patient simulators and other state-of-the-art medical simulation technologies educate Army medics, nurses and doctors in realistic environments.
Page 40

FEATURES

2012 AUSA Annual Meeting and Exposition—
The Soldier: On Point *for* Change and the Point *of* Change
By Dennis Steele
Secretary of the Army John M. McHugh and Army Chief of Staff GEN Raymond T. Odierno described the spirit of the American soldier and how the soldier's strength will contribute to success in the missions the U.S. Army continues to undertake. Former Secretary of State James A. Baker III focused on lessons learned from GEN George C. Marshall. ***Page 30***

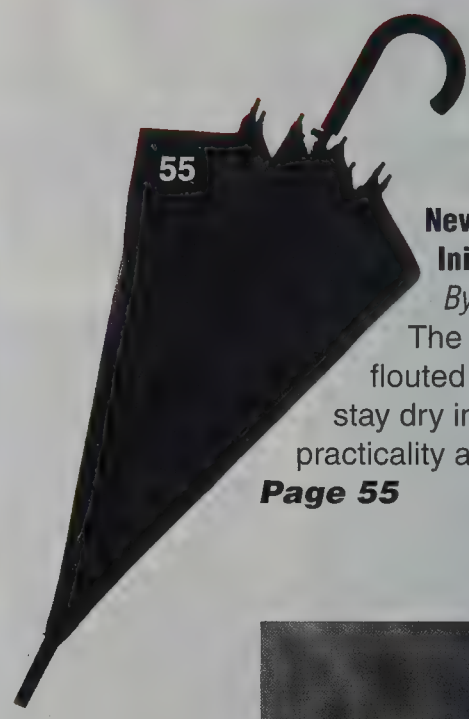
China Remembers GEN Stilwell's Soldiers
By COL John Easterbrook, USA Ret.
A new memorial in the Tengchong Cemetery honors all Chinese soldiers who fought against the Japanese in the China-Burma-India Theater under the command of GEN Joseph W. Stilwell.
Page 46

ARMY CONTENTS

50

Homestation Instrumentation Training System (HITS)
By Scott R. Gourley
A new Army training program enables home-station trainers to assess the impact of local live-training events from platoon through battalion levels.
Page 50

55



Never Underestimate Soldier Initiative and Common Sense
By MG Guy S. Meloy, USA Ret.
The story of a soldier who flouted an Army custom to stay dry in Vietnam commends practicality at the price of tradition.
Page 55

58

Historically Speaking: Fredericksburg at 150
By BG John S. Brown, USA Ret.
December 13 marks the 150th anniversary of the Battle of Fredericksburg, a bloody campaign that witnessed an operational concentration of forces and an assault river crossing that did considerable credit to the reputation of Union arms. ***Page 58***

Company Command: Building Combat-Ready Teams Afghan Partnership 2012
Company commanders from 1st Brigade, 82nd Airborne Division, share insights gained conducting counterinsurgency operations partnered with Afghan soldiers in Ghazni Province. ***Page 63***

63

DEPARTMENTS

Letters 5
Advertisers in This Issue 5
Washington Report 6
News Call 8
Soldier Armed 69
Sustaining Member Profile 72
Reviews 73

HONOR
DOES NOT HAVE TO BE DEFENDED.
FREEDOM DOES.
SCAN. EXPLORE
BLACKHAWK.COM
BLACKHAWK!
HONOR. AS A WAY OF LIFE.
You Tube

GEN Gordon R. Sullivan, USA Ret.
President, AUSA

LTG Theodore G. Stroup Jr., USA Ret.
Vice President, Education, AUSA

Mary Blake French — *Editor in Chief*
Larry Moffi — *Managing Editor*
Joseph L. Broderick — *Art Director*
Dennis Steele — *Senior Staff Writer*
Toni Eugene — *Associate Editor*
Christopher Wright — *Production Artist*
Jeremy Dow — *Assistant Editor*
Katharine Scott — *Assistant Editor*
Thomas B. Spincic — *Editorial Assistant*

Contributing Editors
GEN Frederick J. Kroesen, USA Ret.; LTG James M. Dubik, USA Ret.; and Scott R. Gourley

LTG Thomas G. Rhame, USA Ret.
Vice President, Finance and Administration, AUSA

James E. Burke — *Advertising Manager*
Meagan B. Bailey
Advertising Production Manager

Norman Campbell — *Fulfillment Director*
Valerie Holman — *Fulfillment Manager*

ARMY is a professional journal devoted to the advancement of the military arts and sciences and representing the interests of the U.S. Army. Copyright©2012, by the Association of the United States Army. ☐ **ARTICLES** appearing in ARMY do not necessarily reflect the opinion of the officers or members of the Council of Trustees of AUSA, or its editors. Articles are expressions of personal opinion and should not be interpreted as reflecting the official opinion of the Department of Defense nor of any branch, command, installation or agency of the Department of Defense. The magazine assumes no responsibility for any unsolicited material. ☐ **ADVERTISING**. Neither ARMY, nor its publisher, the Association of the United States Army, makes any representations, warranties or endorsements as to the truth and accuracy of the advertisements appearing herein, and no such representations, warranties or endorsements should be implied or inferred from the appearance of the advertisements in the publication. The advertisers are solely responsible for the contents of such advertisements. ☐ **RATES**. Individual memberships and subscriptions payable in advance (one year/three year): $21/$63 for E1-E4, cadets/OCS and GS1-GS4; $26/$71 for E5-E7, GS5-GS6; $31/$85 for E8-E9, O1-O3, W1-W3, GS7-GS11 and veterans; $34/$93 for O4-O6, W4-W5, GS12-GS15 and civilians; $39/$107 for O7-O10, SES and ES; life membership, graduated rates to $525 based on age; $17 a year of all dues is allocated for a subscription to ARMY Magazine; single copies, $3.00. For other rates, write Fulfillment Manager, Box 101560, Arlington, VA 22210-0860.

ADVERTISING. Information and rates available from the Advertising Production Manager or our advertising representatives, who are:

The Audit Bureau

James E. Burke and **Irene Lamar**, 230 Park Ave., Suite 1546, New York, NY 10169. (212) 697-2844. FAX (212) 682-1421. Email: advdpt@aol.com.

ARMY (ISSN 0004-2455), published monthly. Vol. 62, No. 12. Subscription $34 a year. Publication offices: Association of the United States Army, 2425 Wilson Blvd., Arlington, VA 22201-3326, (703) 841-4300, FAX: (703) 841-3505, email: armymag@ausa.org. Visit AUSA's web page on the Internet at www.ausa.org. Periodicals postage paid at Arlington, Va., and at additional mailing office.
POSTMASTER: Send address changes to ARMY Magazine, Box 101560, Arlington, VA 22210-0860.

Best Warriors

Two soldiers were honored as NCO of the Year and Soldier of the Year at the Association of the U.S. Army's Annual Meeting and Exposition in October. SSG Matthew Senna, 7th Army NCO Academy, Grafenwoehr, Germany, was named the Army's Noncommissioned Officer of the Year, and SGT Saral Shrestha, U.S. Army Special Forces Command, Fort Bragg, N.C., was named the Soldier of the Year. The two beat 22 other soldiers and NCOs from across the service in the Best Warrior Competition held earlier in the month at Fort Lee, Va. SSG Senna, who has served in the Army 10 years, is pursuing an associate degree with an eye to completing his bachelor's degree and attaining the rank of command sergeant major. SGT Shrestha, who came to the United States from Nepal as a teenager and joined the Army at age 21, has served in the Army three years. He holds a bachelor's degree in computer information science and aspires to a master's degree in computer engineering and becoming an Army officer.

See page 30 for more coverage of AUSA's Annual Meeting and Exposition.

Letters

'Let's Light a Few Candles.'

■ I love BG James R. Moran's article, "Army Acquisition: Let's Light a Few Candles," in the November issue of ARMY. It is the first of many candles that should be lit and a great overview. Army requirements have been a mess for quite some time.

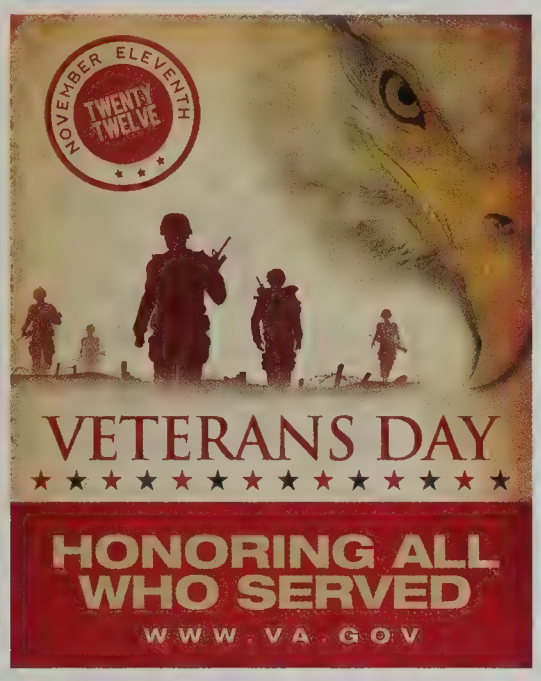
Another candle that needs to be lit is the focus on systems architecture and integration. I think that the renewed interest of the Assistant Secretary of the Army (Acquisition, Logistics and Technology) in systems engineering plans within the materiel developer community is a good start.

On the negative side, I think the focus on testing is misplaced. Testing does not build in quality; it verifies that the item has been built. Without a discrete set of requirements, a clear vision of the architecture, and a reasonably thought out plan of implementation based upon current funds, technology and needs, Army Acquisition will continue to have problems with development, synchronization and sustainment.

CARL F. MENYHERT
Red Bank, N.J.

'Who and What Is a Veteran?'

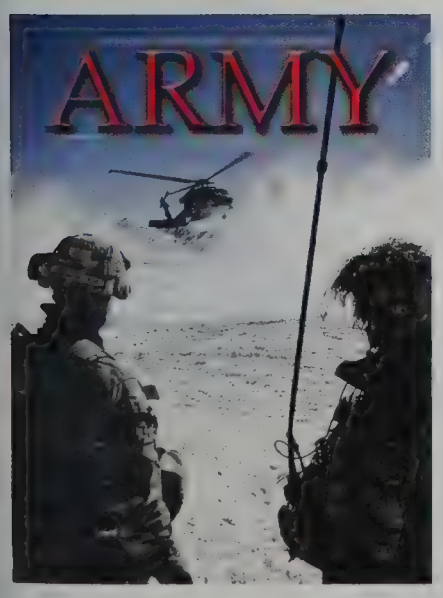
■ I want to recognize MG Guy S. Meloy's article, "Who and What Is a Veteran?" which appeared in the November issue of ARMY. MG Meloy's



article should be published in newspapers around the United States so that people will know what Veterans Day really means. Most veterans, maybe all, don't really care about the sales and commercial events that take place on this date. This date and many other important ones have lost their meanings and become just another excuse for a sale or a day off for many employees. MG Meloy's description of veterans, and what we have done and are still doing is the best I have seen in print. It lifted my spirits as we celebrate all veterans who have contributed to what the United States is today. Great job, MG Meloy.

MAJ DONALD W. DOERFLER, USA RET.
Hamilton, Mont.

This Month's Cover



U.S. Army SSG Neil Nunez and SSG Justin Puchalsky, Company A, 2nd Battalion, 28th Infantry Regiment, Task Force 3-66, await the arrival of a helicopter at their remote combat outpost in Marzak, Afghanistan. The village of Marzak has been a haven for insurgent fighters throughout the past decade. A new police checkpoint, however, is being constructed this winter to disrupt the movement of insurgent forces through the area, which is located six kilometers from the site of the Battle of Takur Ghar. *(Cover photograph by U.S. Army /SSG Charles Crail)*

ARMY Magazine welcomes letters to the editor. Short letters are more likely to be published, and all letters may be edited. Please send letters to The Editor, ARMY Magazine, AUSA, 2425 Wilson Blvd., Arlington, VA 22201. Letters may also be faxed to (703) 841-3505 or sent via email to armymag@ausa.org.

ADVERTISERS IN THIS ISSUE

AUSA Membership	68
BlackHawk	3
Boeing BDS	Cover II, 13
Bradley's Military	5
General Dynamics C4 Systems	11
L-3 Communications	Cover IV
Navy Federal Credit Union	7
Northrop Grumman Corp.	9
Raytheon Company	Cover III

ADVERTISING. Information and rates available from the Advertising Production Manager or our advertising representatives:

The Audit Bureau

James E. Burke and **Irene Lamar**, 230 Park Ave., Suite 1546, New York, NY 10169. (212) 697-2844.
FAX (212) 682-1421. Email: advdpt@aol.com.

Washington Report

Budget Issues Remain in Election's Wake

The re-election of President Obama in November solidified the administration's plans for a $487 billion reduction in projected Defense spending along with a reduction in Army end strength. One new development is that during the third presidential debate, President Obama promised that sequestration "will not happen," which leaves the lame-duck Congress to find a way to avoid the automatic across-the-board budget cuts scheduled to begin in January.

The Senate lost one veteran incumbent, Sen. Scott Brown (R-MA), who was defeated by Elizabeth Warren. Of at least 16 veterans of Iraq and Afghanistan newly elected to the House of Representatives, two are women. Tammy Duckworth, an Army veteran who lost both legs when her helicopter was shot down in Iraq in 2004, was elected in Illinois' 8th Congressional District, defeating incumbent Republican Joe Walsh. Ms. Duckworth was nominated by President Obama in 2009 to serve as an assistant secretary of the Department of Veteran Affairs, a position she held until she resigned in 2011. She is a lieutenant colonel in the Illinois National Guard. Tulsi Gabbard, elected in Hawaii's 2nd Congressional District, became the youngest person ever elected to the Hawaii legislature when she won a seat in the state House of Representatives at age 21 in 2002. In 2004 she deployed to Iraq with the National Guard's 29th Brigade Combat Team as a medical operations specialist, and in 2008 she served in Kuwait training counterterrorism units. Born in American Samoa, Ms. Gabbard is the first Hindu elected to Congress.

MG William Enyart, U.S. Army retired, previously the adjutant general of the Illinois National Guard, was elected to represent Illinois' 12th Congressional District. MG Enyart, who served in the military during the Vietnam War, became the adjutant general of the Illinois National Guard in 2007. He resigned in June after nearly 36 years of military service.

War Veterans Elected. At least 16 veterans of Iraq and Afghanistan—a record number—were elected to Congress in the November election. All will serve in the House of Representatives. According to Iraq and Afghanistan Veterans of America, they were elected from among 42 new veterans that ran in the election. Three veteran races were still too close to call as ARMY Magazine went to press. The winning veterans (including incumbents), their districts and their party affiliations are listed below.

Kerry Bentivolio	Michigan, District 11	Republican
Jim Bridenstine	Oklahoma, District 1	Republican
Mike Coffman	Colorado, District 6	Republican
Doug Collins	Georgia, District 9	Republican
Thomas Cotton	Arkansas, District 4	Republican
Ron DeSantis	Florida, District 6	Republican
Tammy Duckworth	Illinois, District 8	Democrat
Tulsi Gabbard	Hawaii, District 2	Democrat
Chris Gibson	New York, District 19	Republican
Tim Griffin	Arkansas, District 2	Republican
Joe Heck	Nevada, District 3	Republican
Duncan Hunter	California, District 50	Republican
Adam Kinzinger	Illinois, District 16	Republican
Scott Perry	Pennsylvania, District 4	Republican
Steve Stivers	Ohio, District 15	Republican
Brad Wenstrup	Ohio, District 2	Republican

Court Remands Case to ABCMR. The U.S. Court of Federal Claims in October remanded to the Army Board for Correction of Military Records (ABCMR) the case of a veteran seeking enhanced military disability benefits for a combat-training injury for which she was not given greater benefits because it was deemed not combat-related. The court charged the ABCMR to reconsider the case and obtain an explanation from DoD as to why it excludes "conditions simulating war" from its definition of "combat-related operations."

Tanya L. Towne, a veteran of the New York Army National Guard for more than 16 years, filed the complaint. She sustained a back injury when she fell about eight feet in full body armor during a building-clearing exercise while training at Fort Drum, N.Y., in 2004 for active duty service in Operation Iraqi Freedom. She then deployed for 10 months to Tikrit, Iraq, where she wore body armor and continued to suffer back pain. Upon her redeployment, medical evaluations determined she was unfit for active duty and was honorably discharged with a 10 percent disability rating in 2009. The Army medical board determined her injury was "combat related" for the purposes of receiving a tax benefit but also that it was not incurred "during performance of duty in combat-related operations."

A George W. Bush administration policy issued in 2008 determined that combat-related injuries are those incurred "as a direct result of armed conflict" and do not include those sustained during training—even simulated combat training for deployment to a war zone. The distinction is important because enhanced medical benefits are provided to those who are injured during combat.

The Federal Claims Court remanded the case to the ABCMR for six months, stayed the case pending the results of those proceedings and mandated that status reports be filed every 60 days. The first report is due late this month.

CASH IN ON GREAT REWARDS.

We know it's nice to be rewarded, and our ***cash*Rewards** credit card does just that. Earn cash back on every purchase, every time. Plus, there are no hidden fees, no caps on rewards, and rewards never expire. Now that's worth cashing in on.

NAVY FEDERAL Credit Union

ARMY
MARINE CORPS
NAVY
AIR FORCE
DoD

To sign up today, visit navyfederal.org or call 1.888.842.6328.

Federally insured by NCUA. App Store℠ is a service mark of Apple, Inc. Android™ is a trademark of Google, Inc. © 2012 Navy Federal NFCU 12219 (9-12)

News Call

Army Responds to Hurricane Sandy

As Hurricane Sandy made landfall in New Jersey in late October, nearly 7,000 National Guard members were already on duty in 11 states helping prepare for the superstorm. Secretary of Defense Leon E. Panetta authorized dual status commanders, who command National Guard forces in several states including New York and New Jersey, among the hardest-hit areas. U.S. Northern Command identified active duty deputies to deploy in support of those commanders. More than a week later, more personnel from the National Guard, Army Reserve and Army Corps of Engineers were still assisting in disaster response efforts in the eastern and northeastern United States.

MG James Grant, chief of the New Jersey National Guard's joint staff, was named dual status commander in that state. More than 2,000 National Guard members in New Jersey helped local responders with rescues, evacuations, debris removal, food and water distribution, and power restoration. BG Michael Swezey was appointed dual status commander in New York, where more than 3,000 National Guard members with some 600 vehicles conducted search and rescue, logistics and harbor patrol missions, food and water distribution, and wellness checks. Five military police companies conducted presence patrols and traffic control points, and assisted local law-enforcement agencies. Their efforts focused on Nassau and Suffolk Counties, Long Island, and the New York City area, where massive power outages shut down entire neighborhoods and flooding swamped subways and halted trains.

Members of the Pennsylvania, Connecticut and West Virginia National Guard helped with food and water distribution, cleanup efforts, route clearance, power restoration and security in their states.

The Army Reserve mobilized three tactical water distribution units to help with relief efforts—the first time the soldiers were activated for a domestic natural disaster. U.S. Northern Command directed the 401st Quartermaster Team, from Pennsylvania; the 402nd, from Florida; and the 431st, from North Carolina, to activate from Joint Base McGuire-Dix-Lakehurst (JBMDL), N.J., for assignment to affected areas.

Among other personnel requests, U.S. Northern Command also tasked the 172nd Preventive Health Team, Joint Base Lewis-McChord, Wash.; the 227th Preventive Health Team, Fort Bragg, N.C.; the 43rd Veterinary Team, Fort Hood, Texas; and the 6th Medical Logistics Movement Center, Fort Detrick Md., to report to JBMDL.

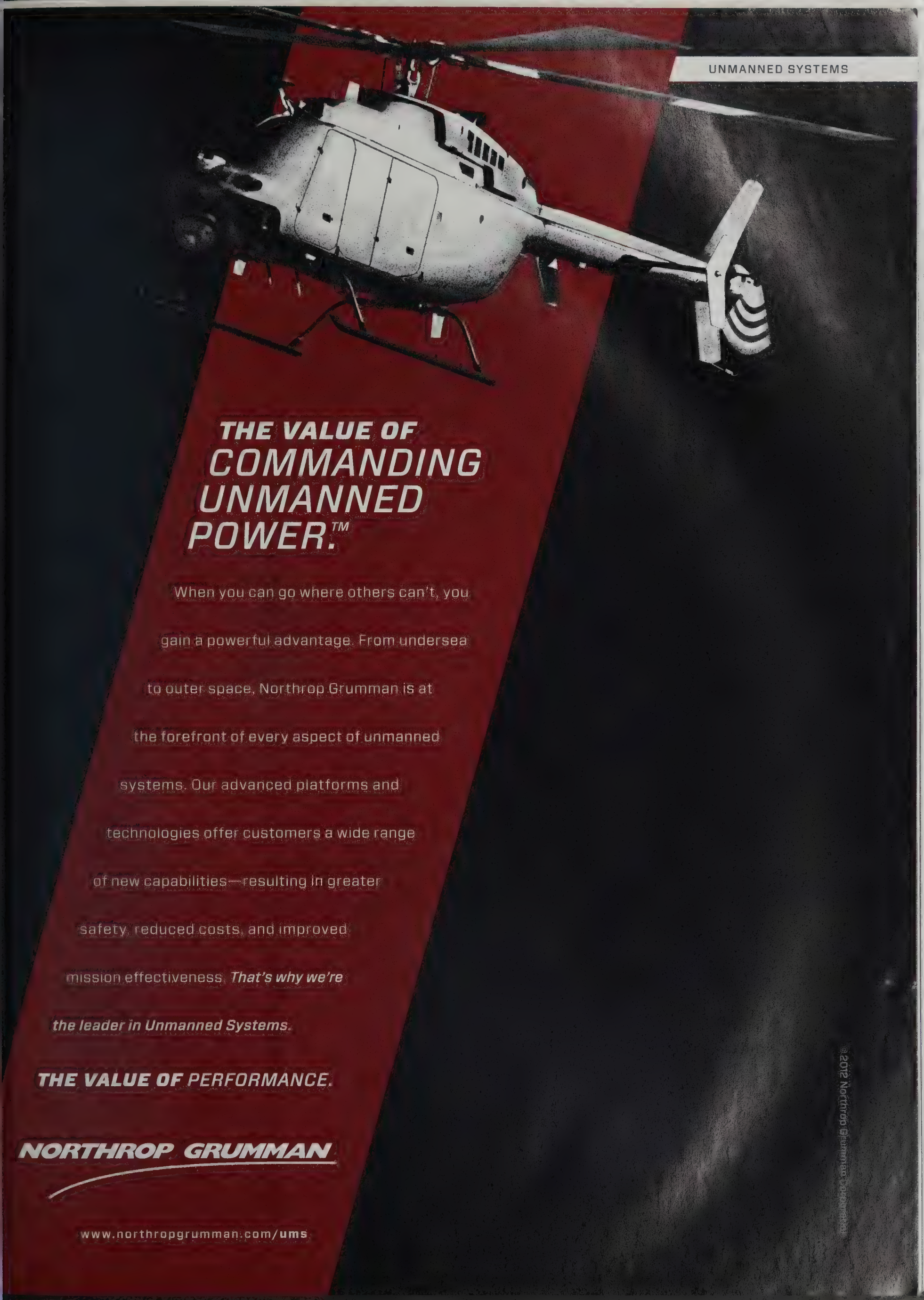
More than 600 U.S. Army Corps of Engineers personnel supported the hurricane response operations, restoring ports, cleaning up debris, providing emergency power, and pumping out flooded subway tunnels and buildings. The Defense Logistics Agency delivered hundreds of thousands of gallons of gasoline and diesel fuel to New York and New Jersey along with thousands of cots and blankets and millions of meals.

U.S. Army/SSG Steve Cortez

Army Chief of Staff GEN Raymond T. Odierno observes the damages caused by Hurricane Sandy in New York City. He visited with members of the Army Corps of Engineers, the New York National Guard and Office of Emergency Management personnel providing relief to the areas devastated by the storm.

Afghanistan Update. In a November press conference, NATO Secretary General Anders Fogh Rasmussen confirmed that the International Security Assistance Force is on track to complete the transition to full Afghan security responsibility by the end of 2014 and presented statistics that show the progress that has been made. Afghan forces, he said, are now in the lead, providing security to 75 percent of the country's population, and are currently conducting 85 percent of the training. Afghan forces still need to improve, he said, but they are meeting the challenges they face now and will be more experienced and more effective by the end of 2014. They now have a force of 10,000 special operations troops, and the enemy is being pushed back so that 80 percent of attacks currently take place in areas that contain only 20 percent of the population.

According to ISAF's latest available data, enemy-initiated attacks were down 5 percent from July through September compared with the same quarter in 2011. Insurgents still rely on improvised explosive devices (IEDs), but more than half of their IEDs and mines were found and cleared between Janu-



THE VALUE OF COMMANDING UNMANNED POWER.™

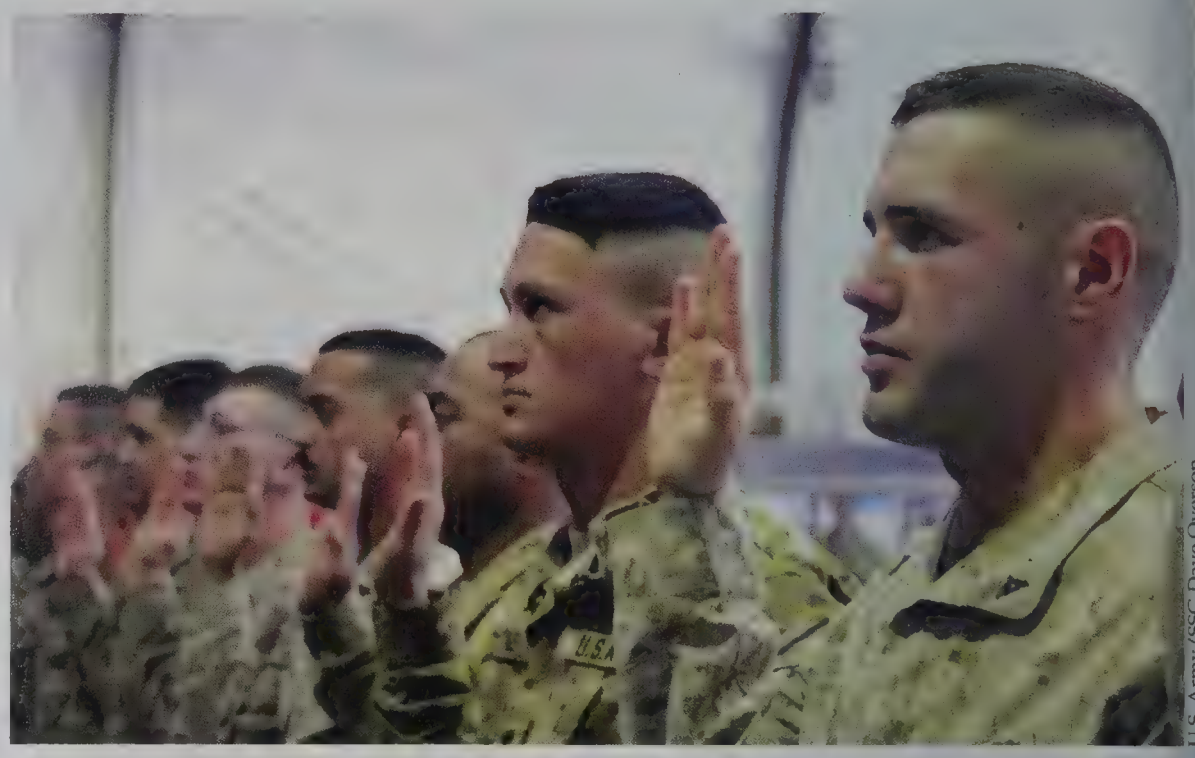
When you can go where others can't, you gain a powerful advantage. From undersea to outer space, Northrop Grumman is at the forefront of every aspect of unmanned systems. Our advanced platforms and technologies offer customers a wide range of new capabilities—resulting in greater safety, reduced costs, and improved mission effectiveness. *That's why we're the leader in Unmanned Systems.*

THE VALUE OF PERFORMANCE.

NORTHROP GRUMMAN

www.northropgrumman.com/**ums**

©2012 Northrop Grumman Corporation



U.S. servicemembers who are deployed to Afghanistan in support of Operation Enduring Freedom swear an oath to become naturalized citizens during a ceremony at Bagram Airfield, Afghanistan, in November.

U.S. Army/SSG Dave Overson

ary and September 2012; executed IED attacks decreased by 16 percent compared with the same time period in 2011.

Apache Block III now AH-64E. Significant program milestones highlighted at the 2012 AUSA Annual Meeting and Exposition included the U.S. Army's announcement that the transformational Apache Block III helicopter has been newly designated as the AH-64 "Echo" (AH-64E).

Pointing to the August 2012 Defense Acquisition Board and subsequent full rate production decision for Apache Block III, COL Jeff Hager, Army project manager (PM) for Apache attack helicopters, observed, "That really secures Apache production for the next several years. We know we have fiscal requirements, but securing the production through a full-rate production decision is just huge for this program—probably the single largest decision that we've had since Block I and Block II went into production. It's that monumental for us.

"The next big piece of news is that Block III has now been designated as the AH-64 'Echo,'" he said. "We are making those changes right now, and we are [determining] that implementation plan ... with Boeing, with our other contractors and within the project office itself, because of things like logistics, manuals and everything else ... with parts designations."

Noting that the Army retired the last of its AH-64 'Alpha' model Apaches in July 2012, he added, "Now we will have an AH-64 'Delta' and an AH-64 'Echo' out there to go forth from this point."

"A lot of the AH-64 'Echo' designation is a logistics issue," said COL John Lynch, capability manager for reconnaissance and attack aircraft with Training and Doctrine Command (TRADOC).

In terms of TRADOC implications from the new designation, Lynch acknowledged that the AH-64E changes will include a new military occupational specialty for warrant officers and a new skill identifier for enlisted personnel. In terms of actual training, however, he said that there would be no significant changes from the validated training initially conducted by Boeing and scheduled to be implemented well before year's end by a PM-led new equipment training team at Fort Riley, Kan.

New ARNG CCWO. Director of the Army National Guard (ARNG) LTG William E. Ingram Jr. announced in October the selection of CW5 Thomas G. (Gary) Ensminger, command chief warrant officer (CCWO) of the Tennessee Army National Guard, as CCWO of the U.S. Army National Guard. He succeeds CW5 Gary R. Nisker. CW5 Ensminger will advise LTG Ingram on all matters pertaining to ARNG policies and actions affecting warrant officers of the component.

CW5 Ensminger has served as CCWO of the Tennessee National Guard since 2008. He was previously the training manager in the Aviation branch of the Joint Forces Headquarters. A native of Nashville, Tenn., he was commissioned as a military police officer in the Tennessee Army National Guard in 1982 from the ROTC program at Tennessee Technological University in Cookeville, Tenn. In 1986, he attended the U.S. Army Aviation Initial Rotary Wing Course at Fort Rucker, Ala., and then joined the Warrant Officer Corps and transferred to the Fourth Squadron, 278th Armored Cavalry Regiment. At the same time, CW5 Ensminger entered the Active Guard/Reserve program as a full-time training officer.

Army Casualties in Afghanistan

The following U.S. Army soldiers were reported killed supporting Operation Enduring Freedom from October 1 to October 31, 2012. All names have been released through the Department of Defense; families have been notified.

SGT Robert J. Billings, 30
SGT Thomas J. Butler IV, 25
CWO Michael S. Duskin, 42
SPC Brittany B. Gordon, 24
SGT Jeremy F. Hardison, 23
SFC Aaron A. Henderson, 33
SGT Donna R. Johnson, 29
SGT Thomas R. MacPherson, 26
SSG Justin C. Marquez, 25
SSG Kashif M. Memon, 31
SFC Daniel T. Metcalfe, 29
SGT Clinton K. Ruiz, 22
SFC Ryan J. Savard, 29
WO Joseph L. Schiro, 27
PFC Shane G. Wilson, 20

- Connected -

Connecting you to a single network – anytime, anywhere. That's our top priority. We are delivering the systems and products you need to safely and effectively complete your mission.

www.gdc4s.com

GENERAL DYNAMICS

©2012 General Dynamics. All Rights Reserved. U.S. Army photo by Staff Sergeant Adam Mancini

GENERAL OFFICER CHANGES*

MG R.P. Ashley Jr. from Dep. CoS, Intelligence, ISAF, OEF, Afghanistan, to CG/Cmdt., USAICoE and Fort Huachuca, Fort Huachuca, Ariz.

MG G.C. Potter from CG/Cmdt., USAICoE and Fort Huachuca, Fort Huachuca, to Dep. CoS, Intelligence, ISAF, OEF.

Brigadier Generals: **R.D. Clarke** from Dep. CG (Ops.), 10th Mountain Div. (L), Fort Drum, N.Y., to Cmdt. of Cadets, USMA, West Point, N.Y.; **T.D. Martin** from Cmdt. of Cadets, USMA, West Point, N.Y., to CG, NTC and Fort Irwin, Fort Irwin, Calif.

***CG**—Commanding General; **CoS**—Chief of Staff; **ISAF**—International Security Assistance Force; **NTC**—National Training Center; **OEF**—Operation Enduring Freedom; **USAICoE**—U.S. Army Intelligence Center of Excellence; **USMA**—U.S. Military Academy.*

**Assignments to general officer slots announced by the General Officer Management Office, Department of the Army. Some officers are listed at the grade to which they are nominated, promotable or eligible to be frocked. The reporting dates for some officers may not yet be determined.*

Vietnam War Pavilion. This year's Veterans Day ceremony at the National Memorial Cemetery of the Pacific, in Honolulu, Hawaii, included the dedication of a new Vietnam War Pavilion, the nation's only Vietnam War memorial built solely with federal funds. The new pavilion houses two mosaic maps that show the overall theater of the Vietnam War and the locations of major battles fought during that conflict.

The American Battlefield Monuments Commission (ABMC) established the Honolulu memorial to honor the sacrifices and achievements of U.S. armed forces in the Pacific during World War II and the Korean War. It includes the names of individuals missing in action and large mosaic maps explaining the Pacific campaigns.

The memorial was enlarged in 1980 to include the missing from the Vietnam War, and this year the two mosaic maps, keeping in color and style with the earlier maps, were added to help tell the story of the American forces who served there.

A second new pavilion will display porcelain panels depicting ABMC commemorative sites in the Pacific and provide an orientation to the memorial.

COMMAND SERGEANTS MAJOR CHANGES*

CSM G. Cervantes from U.S. Army South, Fort Sam Houston-JB San Antonio, Texas, to NTM-A and CSTC-A, Afghanistan.

CSM J.T. Stitzel from 3rd U.S. Infantry Regiment (The Old Guard), Fort Myer, Va., to USARAF, Vicenza, Italy.

Photograph currently unavailable: **CSM A.J. Spano** from 3rd Brigade Combat Team, 25th Infantry Div., Schofield Barracks, Hawaii, to 2nd Infantry Div., South Korea.

■ ***CSTC-A**—Combined Security Transition Cmd.-Afghanistan; **JB**—Joint Base; **NTM-A**—NATO Training Mission-Afghanistan; **USARAF**—U.S. Army Africa.*

**Command sergeants major positions assigned to general officer commands.*

Leadership Changes. President Obama nominated GEN David M. Rodriguez, commanding general of U.S. Forces Command, to succeed GEN Carter F. Ham as commander of U.S. Africa Command, Secretary of Defense Leon E. Panetta announced in an October news briefing at the Pentagon.

GEN Rodriguez, now responsible for staffing, training and equipping 265,000 active component soldiers as well as training and readiness oversight of 560,000 soldiers of the Army National Guard and Army Reserve, previously commanded the International Security Assistance Force Joint Command in Afghanistan and helped design the campaign there.

Headquartered in Stuttgart, Germany, U.S. Africa Command is the newest of the nine combatant commands and was officially activated in October 2007. It is responsible for U.S. military relations with 54 countries, encompassing all of Africa and its adjacent waters except for Egypt.

Sundt Construction

Warrior in Transition barracks at Fort Polk, La., are specially designed to accommodate a wide variety of medical, psychological and social needs for wounded soldiers as they prepare to transition back to military or civilian life. The facility has 112 apartment-style units.

Warriors in Transition. A new Warrior in Transition barracks recently opened on Fort Polk, La. The 112-room facility, which houses wounded active duty soldiers, is located just a short distance from Bayne-Jones Army Community Hospital. The barracks are a place where injured warriors receive treatment and heal before returning to military or civilian life, and are designed to accommodate a variety of medical, psychological and social needs.

The barracks are part of a three-phase Warrior in Transition federal construction building project commissioned by the Army Corps of Engineers, Fort Worth, Texas, District. The Warrior in Transition Unit (WTU) also includes a soldier and family assis-

THE APACHE ADVANTAGE: SUPER CONNECTIVITY.

AH-64D Apache Block III delivers unprecedented networked connectivity between Apaches and other rotorcraft, aircraft, ground vehicles and foot soldiers. On-cost and on-schedule, the newest Apache also features an open architecture and 25 new technology insertions: to ensure superior performance and reduce cost of ownership—technology for total advantage.

BOEING

tance center and a Warrior Transition headquarters.

The Army created WTUs in 2007 to consolidate control of medical hold units to ensure consistent quality in medical care, leadership and administrative support to every soldier. Before the creation of the WTUs, active duty soldiers requiring special care would remain assigned to their units. The idea behind the restructuring was to streamline care.

The Fort Polk Warrior in Transition barracks are among five such facilities that Sundt Construction has completed or is building at multiple military installations across the country.

Warrior Leader Course. A restructured Warrior Leader Course (WLC) that lasts longer and contains subject improvements and additions will begin in January. The revisions to the course, which is a critical element in the NCO Education System, come after a year-long review requested by GEN Robert W. Cone, commanding general of U.S. Army Training and Doctrine Command. The review resulted in suggested changes and improvements tested in three iterations of a pilot course taught at Fort Hood and Fort Bliss, Texas. The WLC will increase from 17 to 22 days, each limited to 8.5 hours, which will provide time for reflection and reinforcement of training in subjects such as counseling and leadership. The new WLC will also include 12 hours of map reading, four of which will have been introduced in a prerequisite course.

The Army Physical Fitness Test will be added to the WLC to ensure that soldiers can meet the Army's fitness, height and weight standards. In addition, the course will include an NCO initiatives class that will allow the introduction of new and emerging trends. Students will also receive increased instruction in the writing of NCO evaluation reports.

SFQC Expands Training. The U.S. Army John F. Kennedy Special Warfare Center and School is incorporating military free fall (MFF) training into the Special Forces Qualification Course (SFQC) through changes in the Military Free Fall Parachutist Course (MFFPC). The MFF training will give the Army's unconventional warfare force a formal, widespread, clandestine infiltration capability to silently and accurately enter any mission environment.

Part of the Warfare Center and School, the MFFPC, run by the Military Freefall School at Yuma Proving Ground, Ariz., is being restructured. Beginning in February 2013, the MFFPC will decrease from four weeks to three weeks, the last two of which will include 30 military free fall operations per course under various conditions and with a variety of equipment.

In fiscal year (FY) 2013, MFFPC will host more than 350 Special Forces soldiers. By FY 2015, when fully staffed and equipped, the school will conduct 19 MFFPC classes annually, training 1,026 MFF parachutists, including 766 Special Forces soldiers.

7th Infantry Reactivates. Seventh Infantry Division (ID) was reactivated in October at Joint Base Lewis-McChord, Wash., to provide training and readiness to designated units there as a subordinate command of I Corps. At the reactivation ceremony, I Corps commanding general LTG Robert B. Brown referenced the diverse history and roles of 7th ID and noted that it now becomes the Army's "Stryker Division." MG Stephen R. Lanza, commanding general of 7th ID and CSM Delbert D. Byers uncased the "Bayonet Division" colors.

The division's five subordinate brigades consist of nearly 18,000 soldiers. They are 2nd Stryker Brigade Combat Team (SBCT), 2nd ID; 3rd SBCT, 2nd ID; 4th SBCT, 2nd ID; 16th Combat Aviation Brigade; and 17th Fires Brigade. The 2nd SBCT deployed to Afghanistan in April 2012; the 4th SBCT cased its colors in October and will replace 3rd SBCT, which is expected to redeploy by Christmas, in Regional Command-South.

Seventh Division was activated in December 1917 and saw brief service in World War I. It is most famous for its participation in the Pacific during World War II, when it took heavy casualties fighting the Japanese in the Aleutian Islands; Leyte, the Philippines; and Okinawa, Japan. Stationed in Japan and Korea after the war, it was among the first U.S. units in action after the outbreak of the Korean War in 1950. It was most recently deactivated in August 2006.

UAS Inaugural Flight. First Infantry Division launched the Gray Eagle Unmanned Aerial System (UAS) out of Fort Riley, Kan., in October, becoming the first unit to fly the system from a home base in the United States. Company F, 1st Attack Reconnaissance Battalion, 1st Aviation Regiment, 1st Combat Aviation Brigade, 1st Infantry Division, debuted the

SENIOR EXECUTIVE SERVICE ANNOUNCEMENTS

M.S. Davis, Tier 2, from Dir., Strategic Initiatives Group to Dep. ASA for Marketing/Dir., Army Marketing and Research Group, both OASA (M&RA) Arlington, Va.

N.H. Keeler, Tier 2, from Dir., Software Engineering Center, CECOM, AMC, APG, Md., to Dep. CG, SCoE, TRADOC, Fort Gordon, Ga.

Tier One: **T. Bagwell Jr.** from Dep. PEO, CS&CSS to Dep. PEO GCS, both OASA (ALT), Warren, Mich.; **J. Bentz** from Dep. AG, IEE Audits to Dep. AG, Acquisition and Logistics Audits, both USAAA, Fort Belvoir, Va.; **W. Crain** from Dir., AMSAA, AMC, APG, Md., to Dir., CAA, ODCS, G-8, Fort Belvoir; **M. Hutchinson** from Exec. Dir., Rock Island Contracting Center, ACC, AMC, Rock Island, Ill., to Dep. Dir., ACC, AMC, Redstone Arsenal, Ala.

__ACC__—U.S. Army Contracting Cmd.; __AG__—Auditor General; __ALT__—Acquisition, Logistics and Technology; __AMC__—U.S. Army Materiel Cmd.; __AMSAA__—Army Materiel Systems Analysis Activity; __APG__—Aberdeen Proving Ground; __ASA__—Assistant Secretary of the Army; __CAA__—Center for Army Analysis; __CECOM__—U.S. Army Communications-Electronics Cmd.; __CG__—Commanding General; __CS&CSS__—Combat Support and Combat Service Support; __GCS__—Ground Combat Systems; __IEE__—Installations, Energy and Environment; __M&RA__—Manpower and Reserve Affairs; __OASA__—Office of the Assistant Secretary of the Army; __ODCS__—Office of the Deputy Chief of Staff; __PEO__—Program Executive Officer; __SCoE__—Signal Center of Excellence; __TRADOC__—U.S. Army Training and Doctrine Cmd.; __USAAA__—U.S. Army Audit Agency.

A U.S. Army Wounded Warrior approaches the finish line during the 28th Annual Army Ten-Miler in Washington, D.C., in October. All proceeds from the event go to the Army's morale, welfare and recreation fund.

UAS at Marshall Army Airfield.

Another Gray Eagle unit, F-227, a full company with three platoons of four UAS each, has been flying the Gray Eagle in Afghanistan since April, but the new "Fenix" company will test the UAV in order to fully integrate it into aviation brigades.

Part of a system that includes ground control stations and ground equipment, the Gray Eagle provides intelligence, surveillance, targeting and acquisition capabilities, can carry multiple sensors, and is equipped with a Hellfire missile.

Belated Bronze Stars. Two Army veterans were awarded long-overdue Bronze Star medals in a ceremony at the Defense Information School at Fort George G. Meade, Md., in November. Former Army doctor CPT Charles E. Rath Jr. served in World War II, and former Army medic SPC4 Charles Shyab served in Vietnam. Because of misplaced paperwork, Rath waited 67 years for his valor award, and Shyab waited 44. Senator Barbara Mikulski (D-MD), keynote speaker at the ceremony, had worked to award both veterans their medals.

Charles Rath was drafted into the Army during World War II following his medical internship, and his Bronze Star was approved in 1945. Rath's citation recalls his meritorious achievement in support of the 63rd Infantry Division's "blood and fire" drive through Central Europe beginning in mid-February 1945, from Sarreguemines in northeastern France through the Siegfried Line to Worms and finally Landsberg, Germany, at the end of April 1945.

Charles Shyab, 68, was approved for the Bronze Star in 1968. He was a medic in one of three companies ordered to ascend Chu Moor Mountain, Vietnam. As the soldiers climbed the peak, they faced a battalion of enemy forces. "Once they found out we were there," said Shyab of the fight in the enemy's "backyard" in April 1968, "they started mortaring us." Seventy men were wounded, he said, and 30 died during the firefight. "The men we lost will always be remembered," Shyab said.

28th Army Ten-Miler. A jump by the U.S. Army Parachute Team, the Golden Knights, marked the opening of AUSA's 28th annual Army Ten-Miler, the third-largest 10-mile race in the world, in late October near the Pentagon in Arlington, Va.

Four members of the U.S. Army World Class Athlete Program—SPC Augustus Maiyo, SPC Kyle Heath, SPC Robert Cheseret and SPC Joseph Chirlee—led the Army in winning the International Cup for the third consecutive year. All four soldiers finished among the top ten of more than 30,000 registered runners in the race.

SPC Maiyo finished second with a time of 47:54, just six seconds behind the winner, Tesfaye Sendeku-Alemayehu from Ethiopia, who took the men's trophy for the second year in a row. Kerri A. Gallagher, from Washington, D.C., was the first woman across the finish line with a time of 56:09. The Commander's Cup for top teams went to the men's team from Fort Carson, Colo., and the women's team from Joint Base Lewis-McChord, Wash.

U.S. Army/David Kamm

Members of the 101st Airborne Division's 1st Brigade will be the first to test the new female body armor in Afghanistan. TIME Magazine selected the armor as one of its annual best inventions of the year.

SPC Tyler Payne fires on a target during the 2012 International Sniper Competition at Fort Benning, Ga., in November. SPC Payne and his teammate, SSG Daniel Horner, won the competition in their first attempt.

TIME Honors Body Armor. An innovation that will leave female soldiers safer and more comfortable on the battlefield has been named one of TIME Magazine's Best Inventions of the Year 2012.

A collaborative effort between the Natick Soldier Research, Development and Engineering Center and Program Executive Office Soldier resulted in an improved outer tactical vest (IOTV), designed specifically for women. The 101st Airborne Division's 1st Brigade will be the first unit to test the new female body armor in Afghanistan. The new armor was designed to offer better protection and to prevent bruised hip bones, which women experienced when wearing IOTVs designed to fit smaller men.

"I think it's great that it shows the American people that we're continuing to make sure that our soldiers have the best equipment in the world," said MAJ Joel Dillon in a recent news release. MAJ Dillon, an assistant product manager, Product Manager Soldier Protection and Individual Equipment, PEO Soldier, said that in a head-to-head comparison with the current IOTV, the female version was chosen by all of the 101st soldiers who tested it.

"They provide a better, more secure fit for female soldiers," Dillon said, noting that additional fine tuning is necessary. Soldiers at Fort Campbell, Ky., where the armor was tested, "had some comments about the location of the buckles on the shoulders and some other adjustability concerns. … [W]e're going to make those modifications before we go out on our next contract," he said. "That is exactly the purpose of the ongoing testing—to make the vest even better."

As MAJ Dillon noted, TIME's recognition shines a spotlight on the continuing, combined effort to improve soldier equipment.

Best Snipers. A team from the U.S. Army Marksmanship Unit (USAMU) is the best worldwide sniper team.

According to a recent news release, SSG Daniel Horner and SPC Tyler Payne outlasted 35 other teams from around the globe to win the 2012 International Sniper Competition in November at Fort Benning, Ga. The field included entries from Ireland, United Arab Emirates, Germany, Denmark, Army Special Forces, the Air Force, Marine Corps and Army National Guard. State police teams from Las Vegas, Nev., Chicago, Ill., and Florida also competed.

The three-day competition—72 hours with just two four-hour breaks—was composed of 14 events, including a sniper stalk, urban shooting and orienteering exercises, firing under stressful conditions, and other tests of marksmanship and sniper skills.

This is the first year USAMU, whose soldiers must be able to shoot rapidly and accurately with handgun, rifle and shotgun, has had a slot to compete in the competition, and the winning team adapted and used that training. USAMU does not teach sniper skills and does not have a sniper team.

Time management was a big factor, according to SSG Horner. "There was no way you could physically get everything done in the time allotted so it was who completed the most in the time they had," he said. You not only had to know the fundamentals, he continued, but also "you had to know how to read wind, calculate mover speed, shoot alternate positions, and be able to physically complete the events, such as the 4.5-mile run with all of your gear."

2012 Hero Dog. Gabe, a retired military dog that completed some 200 combat missions in Iraq, was named the American Humane Association's Hero Dog of 2012 at an awards ceremony in Los Angeles in October.

The golden Labrador Retriever was rescued from a Texas shelter and trained by the military to sniff out insurgent bombs, guns and ammunition. He deployed to Iraq in 2006 and was credited with 26 explosives and weapons finds before retiring from the military with numerous awards in 2009.

Gabe's ex-handler and now owner, SFC Charles (Chuck) Shuck, a drill sergeant leader at the Fort Jackson, S.C., Drill Sergeant School, submitted Gabe's name in the military dog category along with a designated charity. Online voting determined the winner in each category, and the dogs each won $5,000 for charity. Gabe was voted best military dog, and his donation went to the United States War Dogs Association, which helps defray the expenses of military dog adoptions and provides care packages to military dog handlers and their partners. The eight finalists moved on to compete for the top spot and an additional $10,000 donation. A panel that included the owners and handlers of last year's finalists selected Gabe as the winner. ★

Front & Center

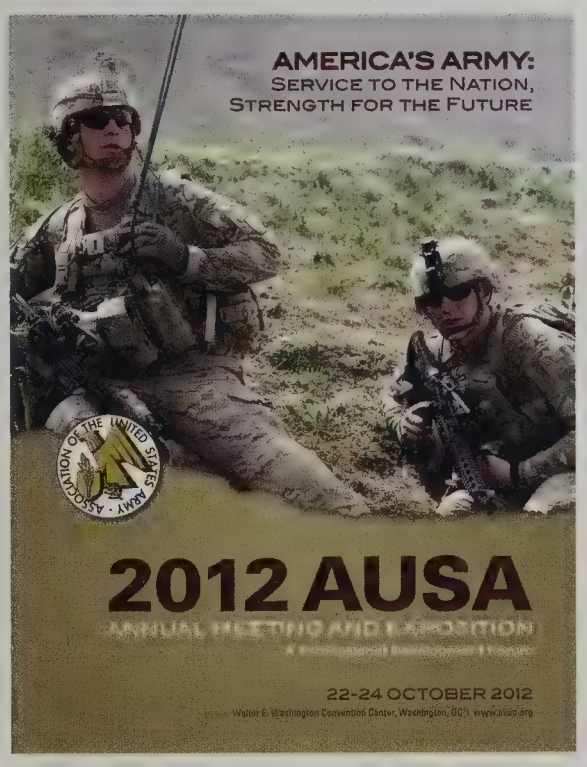
Our Future Army

By GEN Frederick J. Kroesen
U.S. Army retired

The 2012 AUSA Annual Meeting and Exposition has come and gone. Once again it was a memorable three days of exposure to Army thinking, Army programs, and Army problems and to the might of American industry poised to support the Army of the future. Wandering through the massive exhibit halls brought on a reasonable conviction that to "buy American" is to assure our continuing battlefield dominance. Further assurance can be gained from the contributions offered by many friends and allies whose companies provided other interesting hardware proposals. The conviction is tempered, however, by the disquieting thought that the sale of such hardware and technology on the world market would counter or threaten to dismantle that dominance.

A longtime observer of the products in those halls has to be impressed with the evolution of weapons systems, communications, surveillance and all the other technology displayed. Overall, it is clear that the battlefield continues to grow more lethal as our industry finds ways to meet what were once only imaginative requirements. As just one example, I was reminded of the "Big 5" projects of the 1970s that actually started as a "Big 8." One of the items dropped out was a ground scout vehicle, but the 82nd Division had been issued three dune buggies and told to test them for utility. They became quite popular: Air defenders wanted to mount their Redeyes, the infantry the M40 recoilless rifle; tankers wanted them as scouts; and the artillery and support command wanted them for cross-country ammunition, resupply and evacuation transport.

Over the years the many versions of the Humvee were spawned, and now, in 2012, there is a proposed modern dune buggy derivative that travels 125 miles per hour on a test track, can carry a small squad, has hooks and hangers for almost any kind of hardware, and can cross almost any terrain, avoiding roads and improvised explosive devices. It could more than meet any of the ground scout requirements expressed 40 years ago. That is just



one example of the continuity of effort that force developers and industry have displayed over the years of AUSA Annual Meetings.

A second purpose of the Annual Meeting is the recognition of soldiers, civilians and activities selected as the best or as the most effective contributors to the Army in the past year. Once again a series of presentations highlighted notable soldier service and community support of Army programs. A long list of prominent speakers during those sessions covered serious and significant topics concerning our history and our current and future status.

Ultimately, however, the meeting is always educational. Panel discussions offered daily an impressive list of speakers and panel members who exposed and explained programs, problems and proposals. The Army Chief of Staff, the Sergeant Major of the Army, senior commanders and staff officers, and civilian leaders and experts were daily participants. Subjects included the Army profession, family programs, special operations, developing a versatile force, retirees, health challenges, and NCO and warrant officer professional development seminars. There were forums on defense strategy, the shift to Pacific engagement, the role of the reserve components and enhancing mission effectiveness, as well as discussions of the Institute of Land Warfare publications. Virtually every subject that is important to the Army was available for study by any inquisitive attendee.

The Army's grasp of that subject material and the programs developed or developing to cope with existing and pending requirements are impressive, and it can be predicted that, as usual, the Army will provide the best fighting force that the allocated resources make possible.

Aye, but there's the rub. Strapped already by the sizable reduction of funds during the past two years—and the promise of more to come—and living with the unmentionable sequestration in some closet whose door will open automatically in January, the Army is likely to find that the allocated resources are inadequate. Returning to an active Army manpower authorization that was too small to cope properly with the last two wars—as proven by the need to employ the reserve components as integral elements of the operating forces and simultaneously contracting for a civilian workforce that equalled the size of the military forces deployed to those war zones—provides no confidence that the new end strength will be adequate to continue the fight in the current generational struggle or to prepare for the next war.

The promise of restoring professionalism to the officer and NCO corps requires restoring resources to U.S. Army Training and Doctrine Command and the return of the Army education system to longer courses, larger faculties and policy changes such as family-accompanied school tours, which now cannot be programmed.

The promises of family programs that will reduce the stresses of the last decade, overcome the suicide and divorce rates, and improve living conditions cannot be met if the Army must adhere to a 24-month rotation policy. Living any longer with a one-year commitment followed by a one-year recovery and reset will not be an attraction in terms of career opportunities. It practically guarantees that lieutenants and buck sergeants will not have time to court someone to marry when they realize they will be spending 10 out of 20 years absent. In addition, current plans to replace brigades deployed on family-accompanied tours with rotating forces can only compound and exacerbate this issue.

One pertinent case study concerns a soldier who, on his seventh combat tour, earned the Medal of Honor, lost an arm, was fitted with a fantastic replacement prosthesis, and reenlisted to complete a full career, wanting to return to his old unit for its next rotation. I admire his pluck and determination and his dedication to his band of brothers and their mission, but I expect—given the opportunity to duplicate his feat—he would likely decline the honor, and I do not expect that there are many who would volunteer to repeat the experience.

While the end strength issue may be the most contentious, the portent for a detrimental impact on research, development and acquisition (particularly the latter) hollows the hopes of the exhibition halls. It would appear more realistic to expect the Army to be living mostly with its legacy hardware instead of a steady flow of new, more modern equipment. The situation will be just as traumatic for our defense industries and make more likely their need to look to the world markets to refill the coffers they have depleted to build what they are now demonstrating.

Whenever a proposal for increased end strength is raised, two counter-arguments are sure to surface. First, manpower is our most expensive resource and we can't afford more, especially as we equip and support a soldier so that he can accomplish far more than his father or grandfather ever did. Conversely, I argue that we are awash in money with more than $800 billion in stimulus funds floating around, from which some 200,000 more expensive soldiers could be supported for a long time. We afforded an all-volunteer Army for almost 20 years before the end of the Cold War. It is not a question of cost; it is a question of the allocation of funds available.

The second argument questions our ability to staff additional structure. We are now enlisting 80,000 new soldiers per year, and the recruiting command is hard-pressed to meet that number. My rebuttal says we met the requirement for 780,000 Army personnel with volunteers from a smaller population than we have today. It also says that if we reduce the stress of an Army that is too small we will reduce the number of captains, majors and sergeants who are now leaving, and the 80,000 annual enlistees will go further in satisfying the increased requirement.

The President recently stated that the Navy has not asked for more ships than he has approved. He probably has the same feeling about Army end strength. I hope someone will tell him that AUSA still believes an active Army of 700,000 would go a long way toward stabilizing the force and ensuring its future capabilities against the ever-threatening world. □

GEN Frederick J. Kroesen, USA Ret., formerly served as Vice Chief of Staff of the U.S. Army and commander in chief of U.S. Army Europe. He is a senior fellow of AUSA's Institute of Land Warfare.

Army's Forward Thinking Finally Gets Energized

By Richard Hart Sinnreich

Several recent reports suggest that Army thinkers finally are beginning to shrug off unnecessary and self-defeating paranoia about the Navy's and Air Force's AirSea Battle concept, and instead focus on how ground forces will contribute in the future to war-winning in a volatile and uncertain conflict environment.

In part, that welcome development reflects the new defense guidance issued by the Pentagon back in January. That guidance, readers may recall, visualized a gradual but deliberate shift of America's defense focus toward the Pacific and specifically downplayed the prospect of further prolonged stability operations such as those that have consumed the Army—indeed, all the military services—for more than a decade.

An even more immediate and compelling driver is the defense budget, which clearly is going to shrink with or without the help of the budget sequestration that has produced so much political hand-wringing. Moreover, notwithstanding campaign rhetoric to the contrary, it's almost certainly coming down no matter who is elected President.

Like the prospect of hanging, threatened budget cuts tend to concentrate the (military) mind. From the Army's perspective, the challenge is to design a smaller and leaner—but also more versatile—ground combat capability, one able on short notice to deploy anywhere in the world with enough combat power to deter or defeat a broad diversity of limited threats, but also able at need to expand rapidly should it find itself confronting a larger and more potent adversary.

The Army has faced that sort of challenge before, but never in so volatile and unpredictable a strategic environ-

The Association of the United States Army's Institute of Land Warfare

ARMY AVIATION SYMPOSIUM AND EXPOSITION

A PROFESSIONAL DEVELOPMENT FORUM

9-11 JANUARY 2013

NATIONAL HARBOR, MARYLAND

FUTURE

of Army Aviation

Will You Recognize U.S. Army Aviation in 2020?

Engage with the broadest expertise as the Army modernizes and transforms.

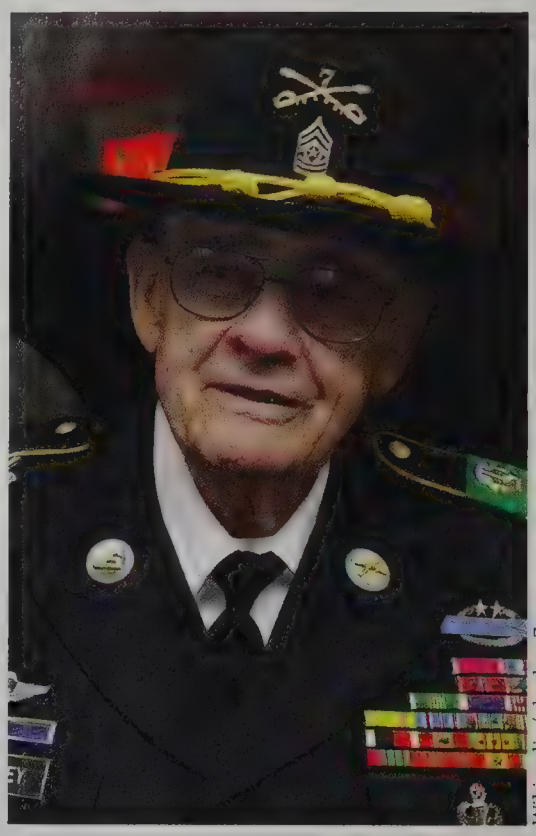
- PM and PEO perspectives on experience, needs and direction
- Learn about critical performance under dynamic field conditions
- Discuss equipment and technology as part of modernization

www.ausaaviation.org

AUSA, Industry Affairs: 800-336-4570, ext. 2665

CSM Basil L. Plumley, USA Ret., 1920–2012

Command Sergeant Major (CSM) Basil L. Plumley, combat infantry veteran of World War II and the Korean and Vietnam wars, died of cancer in Columbus, Ga., on October 10. He was 92.



Wikipedia/ahodges7

CSM Plumley was best known for his actions as sergeant major of the 1st Battalion, 7th Cavalry Regiment, which fought off 2,000 North Vietnamese forces at the three-day Battle of Ia Drang in November 1965. He was one of only about 300 soldiers to earn the Combat Infantryman Badge in three different conflicts. His service included more than 20 military operations in a career lasting more than 30 years.

Born into a coal-mining family in West Virginia, CSM Plumley enlisted in the Army in 1942 after completing two years of high school. He participated in the Sicily Campaign in 1943, making four combat jumps with the 320th Glider Field Artillery Battalion during the war, one while participating in the D-Day invasion of Normandy. In Korea he fought with the 187th Airborne Infantry Regiment, making another combat jump. He later served two tours in Vietnam.

CSM Plumley retired from the Army in 1974 at Fort Benning, Ga., his last duty station, holding 27 awards and decorations, among them the Silver Star, Bronze Star and Purple Heart. He then took a civilian job for the next 15 years doing administrative work at Martin Army Community Hospital at Fort Benning, where he assisted in the opening of the Army's National Infantry Museum in 2009.

CSM Plumley was already an Army legend when LTG Harold G. Moore, U.S. Army retired (the lieutenant colonel commanding 1st Battalion at Ia Drang) and newspaper correspondent and columnist Joseph L. Galloway, a United Press International journalist then assigned to the unit, co-authored a 1992 book about the battle—*We Were Soldiers Once … and Young*—that described Plumley's courage, tenacity, discipline and devotion to his men. It also revealed his wit, his plainspokenness and his occasional irascibility. His renown grew even greater when the book was followed by a film of the same name with actor Sam Elliott playing the sergeant major, but CSM Plumley did not share war stories and declined interviews.

A memorial service for CSM Plumley was held at the Infantry Center Chapel at Fort Benning. Among hundreds of Army leaders past and present who attended was LTG Moore. CSM Plumley's daughter, Debbie Kimble, was accompanied by Sam Elliott. An honor guard from the 7th Cavalry at Fort Hood, Texas, escorted the coffin to the Main Post Cemetery, where CSM Plumley was interred next to his wife of more than 60 years following a brief graveside service. He is survived by his daughter, a granddaughter and two great-grandchildren.

ment, nor one in which continued U.S. technological supremacy is less assured. It was in no small part the latter problem that helped convince the Navy's and Air Force's brightest that preserving America's vital aerospace and maritime freedom of action would require a new conceptual approach.

Ditto in spades for ground forces, for which the institutional challenge is, if anything, even greater than for their sister services. Force mix, organizational design, equipment acquisition, education and training—all depend crucially on bets about how much of what kind of ground forces the Army will need in the future to deploy, how quickly, where and for what purpose.

History confirms that we almost never get those bets entirely right. Former Defense Secretary Donald Rumsfeld took a fair amount of flak for his comment in December 2004 that "you go to war with the Army you have … not the Army you might want," but the historical validity of his comment is hard to contest.

Tacitly acknowledging that reality, the Army's forthcoming operating concept visualizes a sort of strategic "swarming" process, in which "globally located joint force elements merge quickly to combine needed capabilities to support combatant commands while achieving economies of scale."

To ensure that at least some forces of the right size and kind are available for that purpose, whatever the contingency and wherever it arises, the Army—capitalizing on its decision to adopt the brigade as its basic unit of commitment—has begun to associate some of those brigades with specific overseas contingency areas, and now visualizes framing future capability development and acquisition requirement to the needs of specific Army formations.

Meanwhile, both to minimize the need to invest U.S. ground forces and assure reliable partners should it become necessary, the Army is enlarging its ability to engage with friendly security forces in important regions.

Finally, according to a recent article in *Foreign Policy*, the Army, in conjunc-

Over 650 of the world's leading defense companies are members of the AUSA Sustaining Membership Program. Is yours?

The Association of the United States Army's (AUSA) Sustaining Membership Program is your vital link to Army decision-makers at the highest levels. As the Army's professional organization, AUSA has played a role in strengthening national security for over 60 years by facilitating partnerships between military decision-makers and industry leaders.

When you join AUSA's Sustaining Membership Program, your company's executives will have the opportunity to share ideas with top Army officials at AUSA events. These events are conducted and attended by high level Army decision-makers, DoD officials and industry leaders – the individuals who are setting the agenda for the Army's future!

Join us today and discover what the AUSA Sustaining Membership Program can do for your business.

AUSA Sustaining Membership Program:

Supporting the Army–Industry Partnership

Association of the United States Army
2425 Wilson Boulevard • Arlington, VA 22201 • (703) 841-4300 ext. 2665 • www.ausa.org

www.ausawinter.org

AUSA

ILW Winter
Symposium
& Exposition

20-22 FEBRUARY 2013
Greater Fort Lauderdale
Broward County
Convention Center

A Professional
Development Forum

AMERICA'S NEXT FIRST BATTLE

Manning, Training, Equipping

America's Army moves forward week by week. Supporting our forces with equipment and training requires two partners, the U.S. Army and the defense industry. The 2013 AUSA Winter Symposium, **America's Next First Battle: Manning, Training, Equipping**, is an integral part of learning about the challenges facing the future Army and what solutions and actions will be taken. The AUSA leadership invites both the U.S. Army and its Industry Partners to be present and to be part of the solutions — ensuring a strong vision for the future, and shaping the Army of 2020 and beyond. For information, contact Alex Brody at 703.907.2665.

tion with U.S. Special Operations Command, is in the early stages of establishing a new "strategic land-power cell," intended to help better integrate conventional and unconventional land warfare capabilities to deal with threats expected in the future routinely to be hybrids of both.

All of these proposed developments are sensible and promising, and their emergence comes none too soon. As GEN Barry R. McCaffrey, U.S. Army retired, wrote of the Army that defeated Saddam Hussein in 1991, "More than a decade was required to build the military force that America eventually watched with such pride during the Gulf conflict."

We shouldn't want another decade to elapse before recovering some of the strategic versatility and operational agility forfeited during a decade of largely static constabulary operations. Neither can we afford to surrender the knowledge and experience acquired during those operations. The ideas that have begun to inform Army concept development promise, in a sensible way, to reconcile both objectives.

Now the only question is when those ideas will be translated into programs. Apart from the budget, the biggest obstacle remains the war in Afghanistan, the demands of which continue, as perforce they must, to preempt any other Army requirement.

That's still another reason, were any more reasons needed, to bring that war to a close as rapidly as possible. □

***Richard Hart Sinnreich** writes regularly about military affairs for* The Lawton *(Okla.)* Sunday Constitution. *This article originally appeared in the September 30, 2012,* Lawton Constitution *and is reprinted by permission of the author.*

Too Quiet on the Western Front

By COL Gary C. Howard
U.S. Army Reserve retired

If there is one clear lesson from the past two decades, it's that when the Army needs members of the Army Reserve, it needs a lot of them. In the first Gulf War, more than 84,000 Reserve soldiers were called up; more recently, in Iraq and Afghanistan, most were deployed one or more times.

Now, with operations winding down and budget cuts looming, we need to think about how best to maintain the strength of this important part of our defenses. Those efforts will rely on robust recruiting, retention and training programs throughout the country. How can we best do this?

Recruiting Challenges

There's a lot at stake. The current reserve components are the only strategic reserve we have. The end strength of the active component is being reduced, and we are likely to rely on the Army Reserve (and to a certain extent the Army National Guard) even more than ever. Since the 1970s, we have been an all-volunteer Army. There is no draft and, even if the political will could be found to reinstitute one, there is no training base to rapidly train a large number of new soldiers. Maintaining the Army Reserve we have is more important than ever.

Unfortunately, several factors give cause for concern about whether we can do that.

First, the pool of eligible potential recruits is shrinking. In 2009, a group of retired military personnel and civilian military leaders issued a report called "Ready, Willing, and Unable to Serve." The report said, "Startling statistics released by the Pentagon show that 75 percent of young people ages 17 to 24 are currently unable to enlist in the United States military. Three of the most common barriers for potential recruits are failure to graduate [from] high school, a criminal record, and physical fitness issues, including obesity."

Second, we are also beset by what has been called the "narrow sliver" problem. Our military is becoming more and more separated from the rest of American society. Then-Secretary of Defense Robert M. Gates noted this problem in a speech in 2010. "We should not ignore the broader, long-term consequences of waging these protracted military campaigns employing—and re-employing—such a small portion of our society in the effort. ... [F]or a growing number of Americans, service in the military, no matter how laudable, has become something for other people to do. In fact, with each passing decade fewer and fewer Americans know someone with military experience in their family or social circle."

Third, over those same last two decades, the Army and the Army Reserve have been relocating to the Southeast. Actions by the Defense Base Closure and Realignment Commission have reduced the number of active posts and moved many units and activities. Even a brief glance at the distribution of senior Army Reserve headquarters reveals the situation. By simple numbers, only six of the 29 senior commands are west of the Mississippi River. Eighteen are from the South or the border states in the Civil War. More critically, only three of the 15 functional and operational commands are west of the Mississippi River.

My experiences were probably similar to those of many commanders outside of the Southeast. As a transportation battalion commander in California several years ago, I was far from any doctrinally correct higher headquarters. The one active and four Reserve transportation groups were east of the Mississippi River. The 143rd Transportation Command was in Florida, and the U.S. Army Transportation Center and School was at then-named Fort Eustis, Va. The functional higher headquarters for my port construction engineering company was in Mississippi. Surface De-

ployment and Distribution Command (then Military Traffic Management Command) was in Virginia. Furthermore, the Office of the Chief of Army Reserve and the U.S. Army Reserve Command were in Virginia and Georgia, respectively.

Since those days, the situation has become even more lopsided. The distance between Reserve units and their doctrinally aligned higher headquarters—a long-standing challenge in the Army Reserve—has been exacerbated.

The Flip Side of the Abrams Doctrine

After the Vietnam War, the so-called Abrams Doctrine stated that we should never again go to war without the support of the entire nation, and one way to ensure that was to involve the Army Reserve and National Guard. Today, the reserve components provide a direct connection to the military for communities across America.

Importantly, the Abrams Doctrine has a flip side. For recruiting and retention, the Army Reserve is not like the active component. The active Army simply recruits from anywhere and moves soldiers to where they are needed. The Army Reserve must recruit soldiers from a relatively local area to fill vacant positions. To effectively recruit and retain members of the Reserve in all regions, the Army Reserve must have a substantial presence in all regions. A broad distribution of units and particularly higher headquarters is needed to support high-quality training, provide reasonable career progression and ensure visibility of the program.

Why Go West?

While the South has been fertile ground for Army Reserve recruiting, we need to recruit for the Army Reserve in all regions. Of the top eight most populous states, six are not in the South (California, New York, Illinois, Pennsylvania, Ohio and Michigan). Can the U.S. Army Reserve survive demographically without these heavily populated states? Maybe, but we are not likely to be as strong as we would be with a high-profile presence in those states. Furthermore, 12 percent of all Americans live in California alone. That means one of every eight Americans is from California.

These numbers are not likely to change soon. The West is the fastest growing region of the United States and also the youngest. The Western region also has some of the highest child dependency ratios and some of the lowest elder dependency ratios.

In addition, much of the growth in California and other Western states has occurred, and will occur, among Hispanics. They have traditionally been well represented in the Army and Army Reserve. For example, the U.S. Army G-1 in 2010 noted that 12 percent of the Army Reserve is Hispanic, a number that is very likely to grow.

Geography and training are also important. President Obama noted that, in the 21st century, we will in-

creasingly focus on the Pacific region. Last January, Defense Secretary Leon E. Panetta echoed this shift in emphasis: "As we move towards this new joint force, we are rebalancing our global posture and presence, emphasizing the Pacific and Middle East. These are the areas where we see the greatest challenges for the future." More broadly based stationing supports deployments, especially on the West Coast. Regarding Asia and the Pacific, California is forward positioned by 3,000 miles. In addition, the West has excellent training areas at Joint Base Lewis-McChord, Wash.; Fort Irwin, Fort Hunter-Liggett, and Camp Pendleton, Calif.

In Support of a National Defense

In the midst of the Revolutionary War, John Adams recognized that the Continental Army had to represent the whole country, and he encouraged the appointment of the Southerner George Washington as commander of what was, at the time, essentially an army of New Englanders.

For a number of years, the Army Reserve has been retreating into a modern-day Pusan perimeter in the Southeast United States. The demographic Inchon is California. The long-term success of the Army Reserve, however, will require us to break out of that mind-set.

A good beginning is to set a policy goal that the Army Reserve, particularly higher operational headquarters, should be appropriately dispersed throughout the country.

There are solid idealistic and practical reasons for a broad base for the Army Reserve. The idea behind the Abrams Doctrine was sound: to involve all Americans in the nation's defense. In recent years, the military has tended to become more separated from the rest of American society. The "1 percent" in this case is the very small percentage of Americans who have a connection to the military. The increasing concentration of the Army Reserve (and the Army) in one quadrant of the country will not eliminate the idea of "us and them"—the few in the military and the rest who barely know that we have a military. In addition, we need to recruit from all parts of the nation—especially from areas of high population growth—and a younger average age to support long-term growth of the Army Reserve.

The stationing of Army Reserve units is fraught with politics and tradition. Nevertheless, a discussion of it is long overdue. It won't happen overnight, but we need to start somewhere. □

COL Gary C. Howard, USAR Ret., was commander of the 1397th Transportation Terminal Brigade at Mare Island, Calif. During his Army Reserve career he served in battalion and company command and staff assignments in 10 units in four states. In his civilian career, COL Howard is the principal scientific editor for an independent biomedical research institute affiliated with the University of California, San Francisco. He has a Ph.D. in biological sciences from Carnegie Mellon University and has published numerous articles in scientific and military publications.

Putting Military Retirees Back to Work

By LTC Richard A. Vargus

For the first time since World War II, military retirees were utilized exclusively to support theaters of war in Operations Iraqi Freedom and Enduring Freedom. The shortage of combat forces in Iraq and Afghanistan required the use of not only the retiree force, but also members of the Individual Ready Reserve (IRR) of all the service components.

At the height of combat operations in 2007–2008, more than 1,000 retirees served in support roles in the United States and overseas, providing years of experience and knowledge. More than 500 retirees served in combat zones performing in vital positions within operation staffs.

Some of us were tasked to use our civilian skills to train fledgling Iraqi and Afghan army and police forces. Many retirees performed their duties for a single tour, but others voluntarily decided to remain on active duty and become subject matter experts in their respective military occupational specialties (MOS). Those who chose to remain in positions of increasing responsibility and authority provided the maturity of age as well as outside successes in business, law enforcement, engineering and other critical specialties in support of our 10-year extended wars in Iraq and Afghanistan.

The majority of retirees who returned to serve did so voluntarily. We volunteered based on our desire to serve our country once again by assisting troops and by sharing our (retired) experience and our maturity with the young men and women of the joint services and coalition partners. Curiously, however, we have been the first casualties of the Department of Defense drawdown, returned to retired status back on the shelf to be dusted off again should there be another major conflict.

With the impact of the DoD drawdown on service end strength and the knowledge that the war on terrorism will continue to be waged worldwide, what will be the effect of returning retirees to a full retired status? Under Title 10, a retiree is technically never retired and, according to DoD, a volunteer can be recalled to active duty until age 70.

My Choice

I returned to active duty in 2005 because of the skills I attained in retirement and my desire to volunteer to go to the combat zone. I had the privilege of establishing and serving as the commandant of the Iraqi National Police Academy, working under the Multi-National Security Transition Command-Iraq (MNSTC-I), Civilian Police Assistance Training Team (CPATT).

This was not the standard utiliza-

tion of retirees, but with my police administration experience and the support of Iraqi interpreters and the great CPATT team, I was able to serve in a position of responsibility and build the academy from the ground up.

I had the opportunity to serve under two MNSTC-I commanders in Iraq, Generals David Petreaus and Martin Dempsey. I was privileged and honored to have had their confidence in the performance of my duties and to serve as the U.S. Central Command (CENTCOM) chief of protective services providing their protection teams. I later served as the chief of law enforcement at CENTCOM headquarters.

Unfortunately the current regulatory guidance on retiree recalls does not allow for promotions or the issuance of performance reports, and does not require physical fitness tests. While many retirees have enjoyed this freedom, the inherent elements of responsibility and authority associated with their positions have caused them to accept self-mandated physical challenges and unofficial annual performance evaluations.

In retrospect, for those retirees returning to civilian employers, engaging in the process of attaining other employment or performing extended periods of service, a copy of one's orders seems an inadequate response to the employers who ask: What job did you do as a retired servicemember for the past five years? Common sense dictates that regardless of status, performance should be documented, officially or unofficially, to serve both as a barometer for the command and as a tool for the retiree to know the job he or she is performing for their command.

As the commander of the Police Academy and in my role as chief of protective service, how could I not lead by example, how could I not lead from the front? Despite my retiree status, I was responsible for soldiers, sailors, airmen and marines, and to be an effective leader you need to always set the example. For those retirees who were in positions of authority, how could we not perform to the same standards that we asked of our subordinates (even when the "senior citizen" standards were much easier)?

My concern, now, is that those of us returning to the retired reserve will not be involved in any follow-on training or have the ability to participate in attaining military education to remain current in our military occupational specialties. This also means we will not be monitored to ensure our capability to be retained or perform additional active duty in support of domestic or international operations.

"My life is based on a true story."

Great Capabilities

Our retiree force offers the active Army great capabilities, and I would recommend that we continue to be utilized to augment the active and ready reserve forces. Contingency operations will be a part of the global war on terrorism for years to come. We need to be prepared to use our entire base of trained and experienced forces to ensure that we don't have to ever significantly ramp up forces needing retraining to support major combat operations again.

Despite what retirees can provide to worldwide contingency missions and in support of domestic operations, for many of us, returning to active duty has led to conflicts in assignment because retirees—having completed their life cycles—are not authorized personnel actions. When recalled to active duty we should not be treated as if we have returned from the grave; rather, we should be granted reclassification if new skills warrant. Based on what military duties we will be asked to perform, it makes no sense having orders denied because of a mismatched MOS.

Retirees could also serve in many other voluntary support roles: casualty assistance officers, duty officers, fillers for holiday season leave, escort officers, trainers, advisors and mentors. The retiree volunteer pool would, however, be required to maintain height and weight standards and personal appear-

ance, and, based on funding a PHA, required to attain medical screening on an annual basis or as designated by the service. The other major change would be the requirement to have "blanket orders" initiated upon the retiree's short duration of active duty. This would allow for immediate recall and negate the current lengthy practice of retirees and reservists applying annually for periods of extensions for orders.

While currently on terminal leave, I served as a retiree recall for nearly eight years. Each year, for both myself and my ready reserve colleagues, the process for remaining on active duty was frightfully painful. Four months before expiration of orders a new request would have to be submitted up through the chain of command for approval. The numerous glitches, time to prepare documents and attain a physical, and the process from initiation to approval in many cases resulted in orders not being published until days before their expiration. The easier route, as practiced during World War II, is receiving orders for "the duration" or until the mission is deemed complete by one's command.

Under this system retiree recall orders would remain generated in the system: If called for periods of less than 30 days, a soldier would file a voucher within the Defense Travel System for a generation of payment; if a soldier were called to active duty for a period in excess of 30 days, the requirement to be placed on the active duty pay system at a military finance office would be initiated. Both actions ensure that the retiree recall is quickly returned to active duty to perform in whatever capacity directed.

We are a proud and honorable part of the Army, ready and willing to serve, so let's rely on lessons learned from this contingency operation and utilize the years of experience and leadership offered by our retired forces within the total force. □

LTC Richard A. Vargus *is a retiree recall, most recently serving as the chief, Law Enforcement Branch, U.S. Central Command. He has more than 40 years military and civilian law enforcement service and has served in various staff and leadership positions at the company, battalion, brigade and combatant command levels.*

Getting Our PT Program Back in Shape

By 1LT Ryan Patrick Hovatter

I recently had a discussion about physical training (PT) that led me to think about how we could improve PT in the Army. A sergeant first class told me that PT wasn't for actual physical conditioning but solely for accountability and discipline. Was his implication that the morning PT formation is solely to ensure that soldiers are alive, at the right place, 15 minutes early and wearing a serviceable reflective belt? He surely wasn't speaking of personal accountability and self-discipline. There are some leaders who believe our soldiers need constant supervision and explicit directions to complete the simplest task. As it relates to PT, that theory is wrong in two ways: one, soldiers are given no authority over their own accountability; two, our current formations lack discipline because they are not using the prescribed time to do meaningful PT.

I believe in the outcomes-based training and education approach. Give soldiers and young leaders a task and let them surprise you with how well they perform. A soldier should be accountable for his or her own physical readiness. Soldiers still must go to PT and conduct it within their ability, but it is their own efforts that get results. Army leadership needs to rethink our PT program all the way from who leads it to how we conduct it, and even what we wear.

The problem lies in the widely held belief that PT is for discipline, but I find discipline instilled in everything we do; it is practiced throughout our lives. Discipline is not holding a formation and making soldiers "dress-right-dress," "extend to the left," "arms downward, move," and so on, nor is it a punishment. Discipline is taking the time the unit gives you and having a demanding and rewarding workout.

It wasn't until Infantry Basic Officer Leadership Course (IBOLC) that I was introduced to a new style of Army PT. It was one that took current civilian concepts and integrated them into our PT program. Our captain told his lieutenants that he wasn't going to show up for morning PT formation and mess around. He said he wasn't going to go home later and work out on his own because the Army already gave him the morning to work out, and he was going to make us use that time, too. He didn't invent anything new; he was our "coach." Not every IBOLC platoon in our company was doing this. Most used their time wisely, but when it was raining, they went home to work out on their own. My platoon trained through everything. We ran circuits, climbed ropes daily, did pull-ups and "burpees," and ran through the woods. Once, we ran a particularly challenging trail that went knee-deep in streams. This was PT we planned and our coach supervised. It was the best period of workouts I had had since wrestling practice 10 years earlier.

This coach was using the same principles that my high school wrestling coach used. He treated us as men. We were responsible for the training. He had plans, but he also made us come up with plans. In the morning our platoon formed in a circle formation instead of the box. Unlike other units, we did not waste 15 minutes with commands to get our unit into position for exercises. We started with a jog in place to get our heart rate up, and then we went around the circle and each man led an exercise. We did not stretch before PT. If an individual needed to, he stretched out beforehand. Our captain's belief was the same as that of many long-distance runners: Stretching out before a run or workout can be detrimental. I left exhausted every morning and felt great the rest of the day. I have my coach to

U.S. Army/Emily Brainard

Flight school students at Fort Rucker, Ala., take to the track as part of their physical training (PT) routine in 2010. After implementing CrossFit-like workouts, Fort Rucker officials reported that PT test failure rates were reduced by 90 percent.

thank for letting me see that the Army does not have to be in its own box. It was such a simple way to run PT.

Workouts are great in small groups of soldiers, but it is up to the individuals to give it their all. Ability groups or routes are necessary when running. Did you ever do the wagon wheel on a run to pick up a straggler? No, you planned a route and met on the other side. People aren't going to die out there. They will make it at their own pace. PT isn't about using the correct commands, yelling at soldiers or enforcing discipline; it is about getting physically trained.

Another aspect that hurts our PT program is the PT uniform. It seems the Army is trying to change the uniform again. Why are we trying to reinvent exercise clothing? It already exists. We need to partner with clothing companies out there and allow a wide range of optional clothing. If that seems unrealistic, think of the Extreme Cold Weather Clothing System. With the cold weather system, individuals can use different layers and have preferences for what works for them. The jacket in particular could be different on individual soldiers, providing their chain of command allows it. The soldier should have preference options. Versatility is essential because one uniform combination may not be suitable for every workout situation.

On the whole, the gear we have is not really designed for workouts. Our PT shirt is heavy and coarse, chafes skin and holds water, and the neckline always seems too tight. Our second worst piece of gear is the shorts; the cut is bad, and they ride up your legs when you run. The soft gray hat seems like it is for the lazy soldier who never runs or works out hard. Running in the cold requires warmth around the ears, but that hat holds in too much heat on the top of your head. A hat with warmth around the ears but a vented top would be better for cardiovascular workouts.

Ideally the Army will come up with a scheme of patterns and colors, preferably black and gold, and allow many options. The Army could issue certain initial basic pieces, and the soldier could choose the rest with his clothing allowance. Soldiers should be expected to make their own judgments as to what is appropriate for workouts.

Company commanders need to give their platoon leadership the freedom to develop their own PT plans and run them. Maybe the best coaches aren't the platoon leader or platoon sergeant, but a team leader who used to play football. Let's empower our soldiers to step up during PT and empower the individual with personal accountability. We can break down the units into small, manageable workout groups. These should not be bigger than a platoon, and perhaps should be smaller at times. Some workouts should be broken down again, or reformed into ability groups. Runs should always be performed according to ability groups or by planning a course that soldiers can run at their own abilities and potential. A simple way to get a platoon of soldiers to run at their own pace is to first warm up together as a platoon, and from there soldiers can run at a percentage of their own pace through a course about three miles long: "Run at 75 percent of your potential. See you in three miles!" At the end the platoon can regroup and continue with more PT together. Giving the fast soldiers a rest at the end of their three-mile run might be an incentive to finish faster so they can relax while the slower ones finish.

The Army needs to get away from the typical view of physical training. We need to empower our young leaders and soldiers with personal responsibility; we need many options for clothing in order to allow for different activities and workouts; and we have to get away from the rectangle formation with all the associated commands. Our goal is to have intelligent soldier-athletes. Challenge the soldiers to be accountable for their actions and use their time the best way possible. □

1LT Ryan Patrick Hovatter *is a member of the Florida National Guard currently serving on active duty for operational support as the executive officer for C/2-29 IN (U.S. Army Sniper School, Basic and Advanced Rifle Marksmanship) at Fort Benning, Ga. Upon completion of his tour he will return to his Guard unit in Tallahassee, C/1-153 Cavalry, 53rd Infantry brigade combat team.*

2013 ARMY Magazine Photo Contest

Sponsored by the Association of the U.S. Army

The Association of the U.S. Army is pleased to announce its annual ARMY Magazine photo contest. Amateur and professional photographers are invited to enter.

The winning photographs will be published in ARMY Magazine, and the photographers will be awarded cash prizes. First prize is $500; second prize is $300; third prize is $200. Those who are awarded an honorable mention will each receive $100.

Entry Rules:

1. Each photograph must have a U.S. Army-related subject and must have been taken on or after July 1, 2012.
2. Entries must not have been published elsewhere. Evidence of prior publication of any entry will disqualify it.
3. Each contestant is limited to three entries.
4. Entries may be 300-dpi digital photos, black-and-white prints or color prints. Photographs must not be tinted or altered. (Send digital photos to tspincic@ausa.org.)
5. The minimum size for prints is 5x7 inches; the maximum is 8x10 inches (no mats or frames).
6. The following information must be provided with each photograph: the photographer's name, address and telephone number, and caption information.
7. Entries must be mailed to: Editor in Chief, ARMY Magazine, 2425 Wilson Blvd., Arlington, VA 22201-3385, ATTN: Photo Contest.
8. Entries must be postmarked by July 31, 2013. Letters notifying the winners will be mailed in September.
9. Entries will not be returned.
10. Employees of AUSA and their family members are not eligible to participate.
11. Prize-winning photographs may be published in ARMY Magazine and other AUSA publications three times.
12. Photographic quality and subject matter will be the primary considerations in judging.

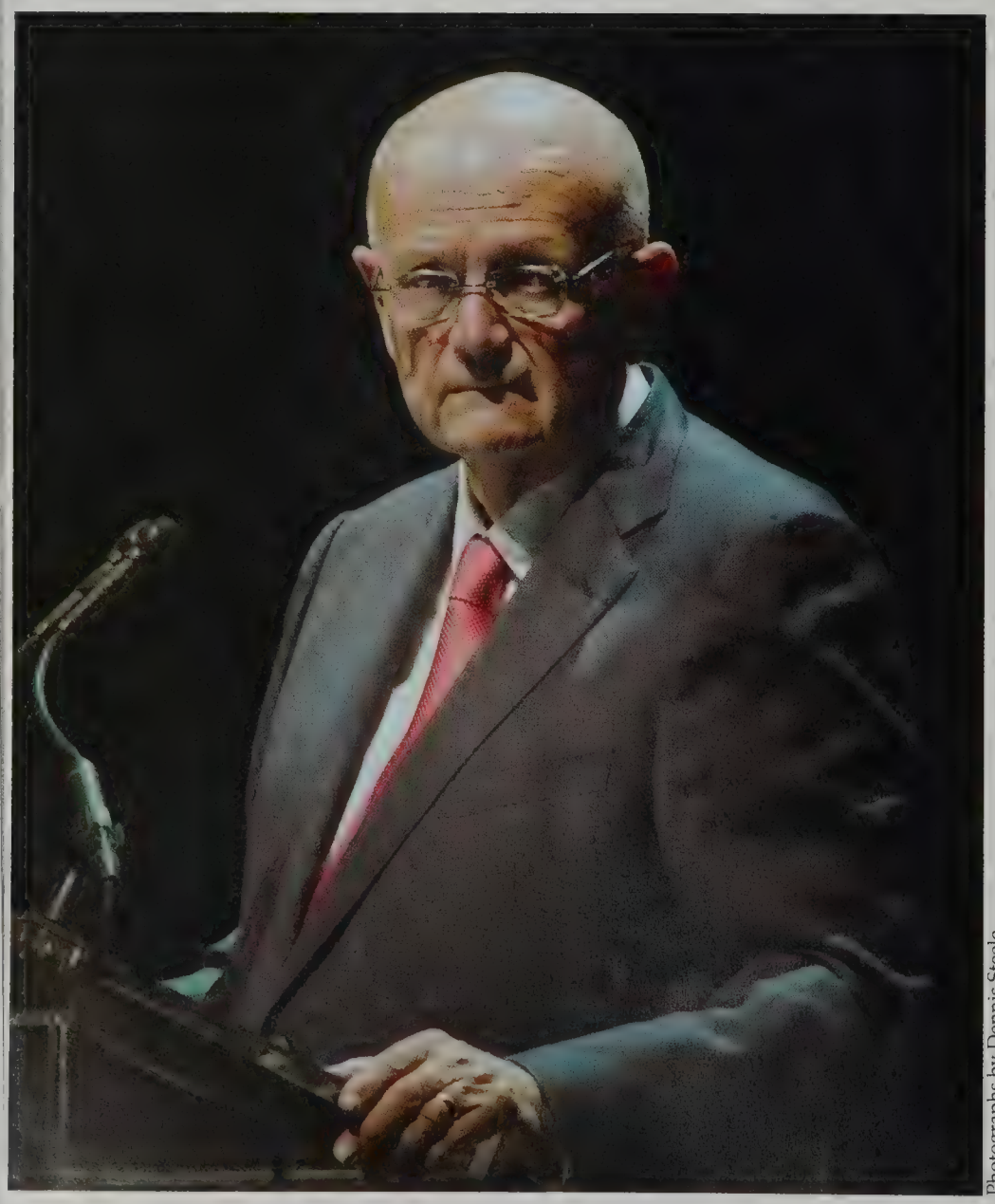
For further information, contact Tom Spincic (tspincic@ausa.org), ARMY Magazine, 2425 Wilson Blvd., Arlington, VA 22201; (703) 907-2604.

For examples of past winners, see www.ausa.org/publications/armymagazine/aboutarmy/Pages/ARMYMagazineAnnualPhotoContest.aspx

2012 AUSA
ANNUAL MEETING AND EXPOSITION

The Soldier: On Point *for* Change And the Point *of* Change

One figure stands at the apex of an unfolding U.S. military era and at the vortex of changes that are fueling that new era—the American soldier.



Photographs by Dennis Steele

AUSA President GEN Gordon R. Sullivan, U.S. Army retired, speaks at the opening ceremony of the 2012 AUSA Annual Meeting and Exposition.

It is not the first time that soldiers of the U.S. Army have occupied that place. Thus it was fitting that soldiers took the stage first at the opening ceremony of the 2012 AUSA Annual Meeting and Exposition to remind everyone about what is most important and who is most significant now and throughout American history.

Outfitted in uniforms depicting important periods in U.S. history from the Revolutionary War to the war in Afghanistan, soldiers from the 3rd U.S. Infantry (The Old Guard) showed the audience through narration and choreographed scenes that change is nothing new and that soldiers have always been the fulcrum and focus of change in addition to being the greatest weapon system ever fielded to defend the United States.

Secretary of the Army John M. McHugh spoke about the American soldier during his opening ceremony address, using the words of former Army Chief of Staff GEN Creighton W. Abrams Jr.

"Abrams noted that people are the Army," Secretary McHugh said, continuing with a quotation from GEN Abrams: "'By people, I do not mean personnel. I do not mean end strength. I mean living, breathing, serving human beings. They have needs and interests and desires. They have spirit and will, and strength and abilities. They have weaknesses and faults; and they have names. They are the heart of our preparedness … and this preparedness—as a nation and as an Army—depends upon the spirit of our soldiers. It is that spirit that gives the Army … life.'"

Secretary McHugh began his speech by relating the question that he is often asked by congressional committee members and the media: What keeps you up at night?

"It's not really that simple a question, and it really requires a pretty complicated, even comprehensive answer," Secretary McHugh observed. "In the most basic terms [however], what keeps me up at night is our nation's econ-

By Dennis Steele
Senior Staff Writer

omy and how it already has and will continue to impact our budget. For the Army, that means coming to terms with equal doses of reality and available resources."

He went on to say that the budget impact "isn't something that was simply dropped on our doorstep, something put upon us by sudden fluctuations in the stock market; the truth is, we've seen this day coming for some time. Most importantly, we've been given the opportunity and the time to get it right—to plan, to prioritize and adjust force structure, equipment and training—and we're doing it," he said.

"We're also better [at] integrating our reserve forces" into the operational force, he continued. "Since America was first attacked in 2001, one of the most important things we've learned is how critical an operational reserve is to our ability to meet mission requirements. How we ensure that the reserve component—both the Army Reserve and the National Guard—remains a trained and ready force is paramount ... to the Army's overall readiness and stability, and our nation's security. And we're going to make sure we do that, and we do it right."

The Secretary announced that he had signed a directive establishing a Total Force policy for the U.S. Army. "Under this directive," he explained, "we will man, train, equip active and reserve components in an integrated operational force. The purpose of it all is to provide predictable, recurring and sustainable capabilities. To put it another way: Incorporating active and reserve components as a Total Force. This directive outlines a number of measures to make integration of those forces seamless: examining force structure options; establishing uniform processes and procedures for validating pre-deployment readiness; developing and implementing a unified personnel management and pay system; ensuring that our equipping strategy promotes procurement programs for a Total Force; facilitating opportunities for soldiers to move between active and reserve component assignments throughout their careers; and ensuring equal standards for professional development."

"Another thing that keeps me up at night," he said, "is wondering whether we're doing enough to reduce the size and cost of bureaucracy, to ensure that we're not needlessly expending resources that could otherwise be used for training, be used for equipment, for properly sizing our force structure."

The Secretary recalled that during last year's Annual Meeting he announced creation of the Institutional Army Task Force to apply proven, workable and creative solutions to help the Army do better with less, not to do more with less, and steps to streamline service contracts.

"We created a single focal point at each command and staff element, consolidated requirements generation, and aligned subject matter experts. Where we once had some 260,000 actions, awarded by 225 different offices, carried out by thousands of different people, we now have six portfolio management centers, consolidating nearly half of all service obligations. And this past year, that effort netted us more than $330 million in savings."

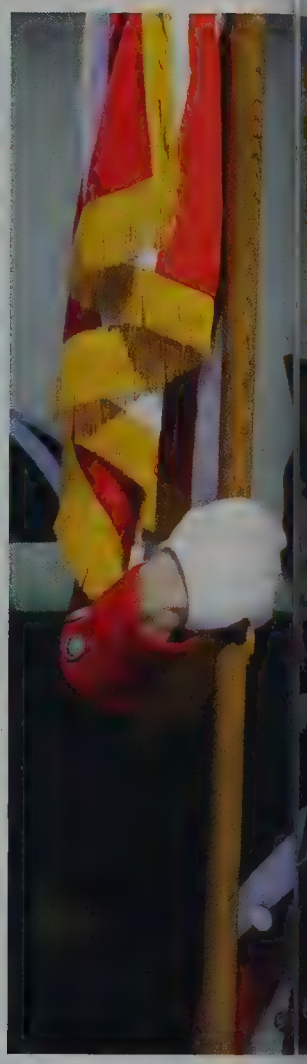
Those efforts will continue this year, according to the Secretary, and with a continued "top-to-bottom review that will make our entire Army smarter and more cost efficient. And these are critically important measures, measures that will streamline our structure, improve our effectiveness and make us organizationally better.

"But this is the Army," Secretary McHugh said. "We don't succeed simply through bureaucracy, we don't prevail only through wise spending, as important as those things are. The heart and soul of America's Army is today what it was on the battlefields of the American Revolution: It is our people. And what keeps me up at night, too—honestly, more than anything else—are not the numbers on a ledger. Not by a long shot. What keeps me up is wondering whether the service and sacrifice of the American soldier is not only appreciated, but really understood—and understood at its core."

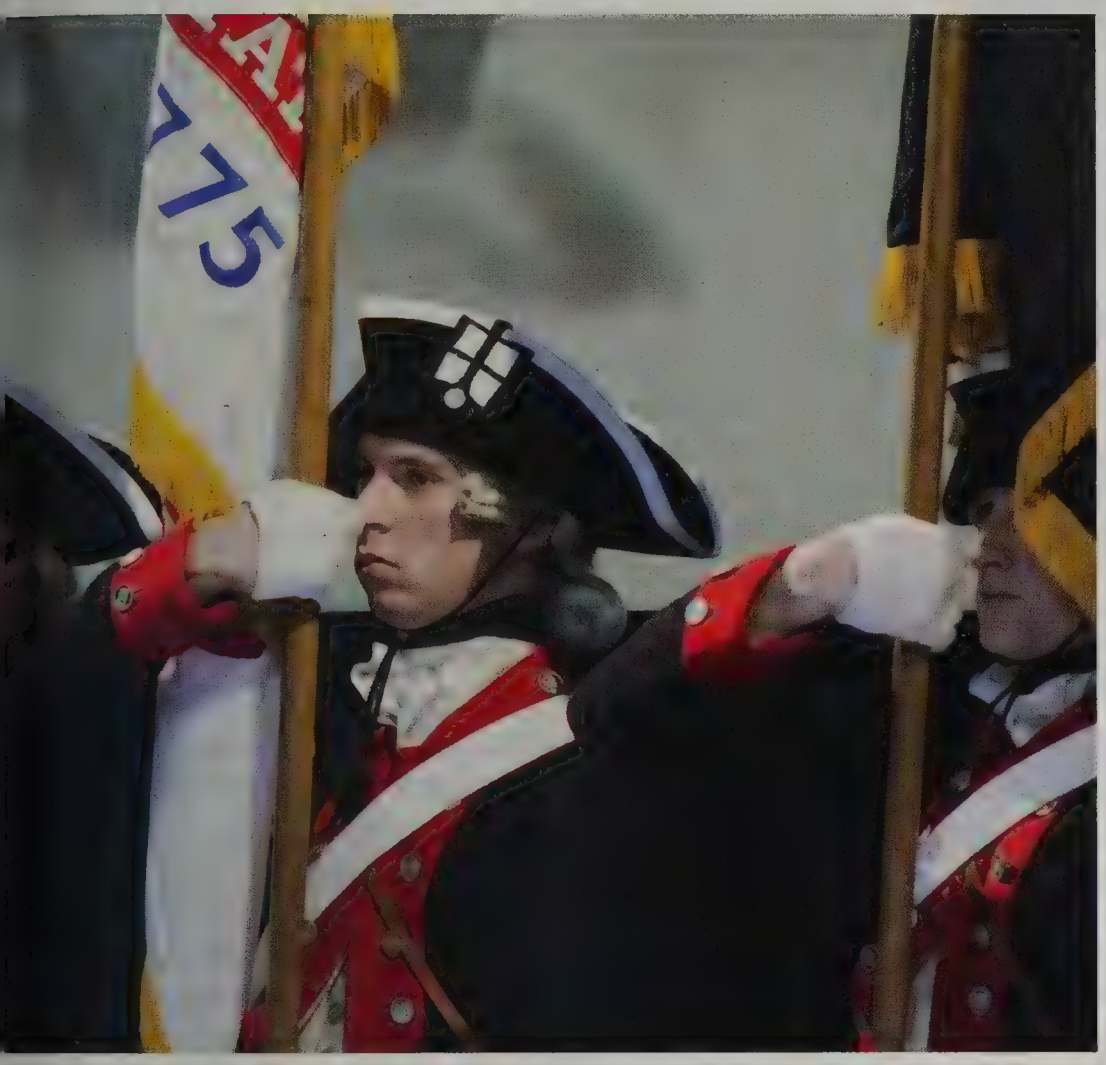
"It keeps me awake knowing how many young lives we've lost to suicide, and determining whether we're do-

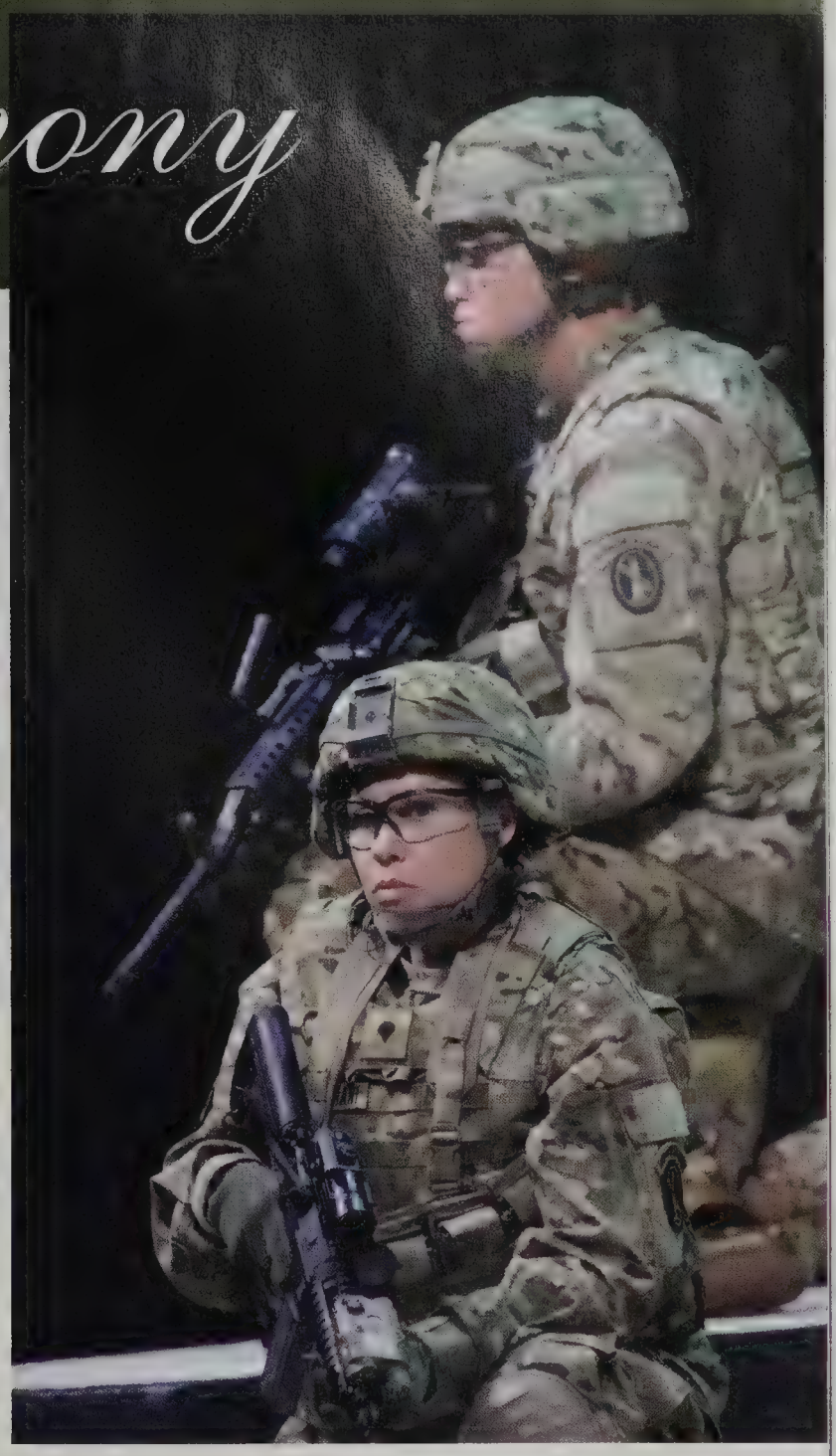
2012 AUSA

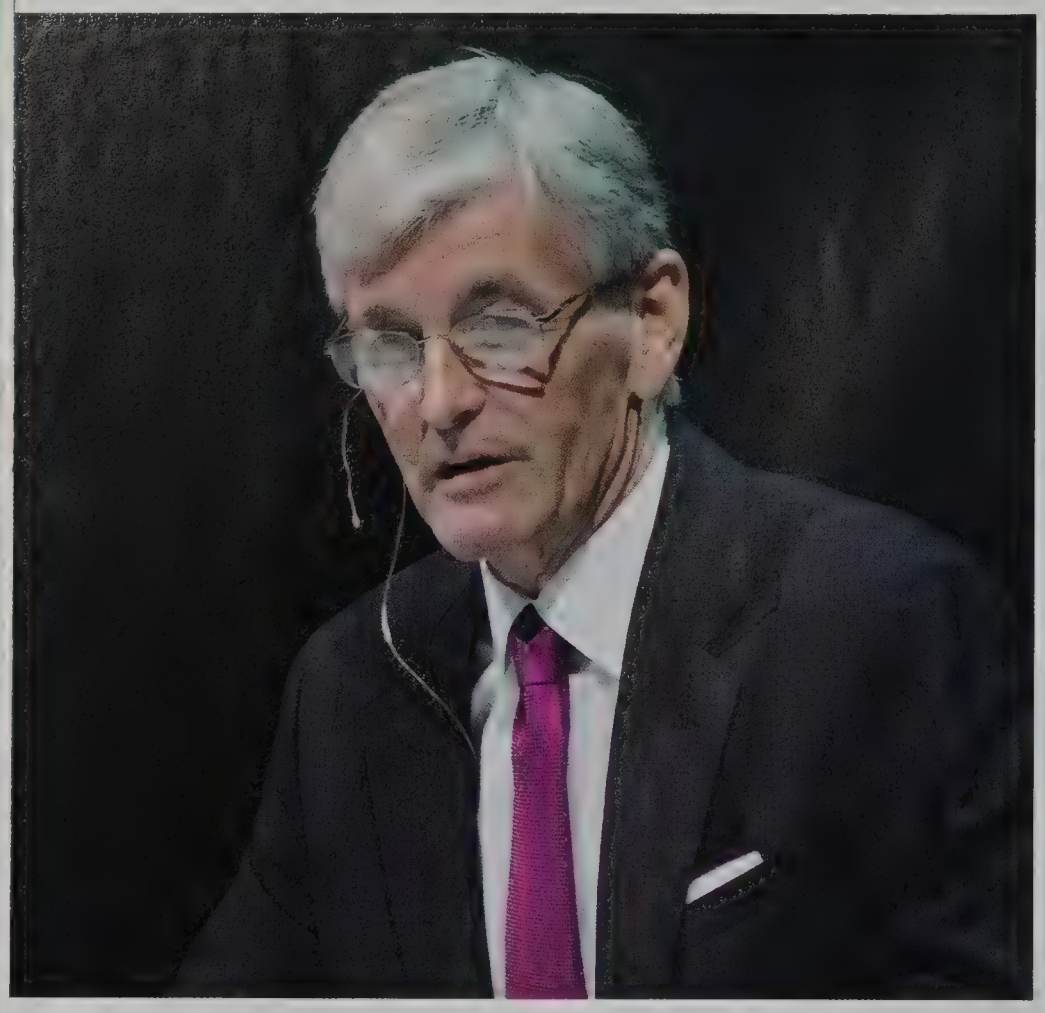
ANNUAL MEETING AND EXPOSITION



Opening Ceremony







In his opening ceremony remarks, Secretary of the Army John M. McHugh addressed subjects such as the budget, integrating the reserve component into the organizational force, reducing bureaucracy, and "whether the service and sacrifice of the American soldier is not only appreciated, but really understood."

ing enough—or can ever do enough—to see the warning signs, to reach out, to help and intervene. … We have to find solutions, we have to work together to make a difference."

"Yes, there are a lot of things that keep me awake at night, but there is something that always … helps me sleep easier: It is the indomitable spirit, the selfless service, the remarkable courage of the American soldier—the strength of the Army, the strength of our nation. And that's why it's important for all of us to be here. That's why these kinds of events are critical: because they bring together individuals and organizations who care about the American soldier, who deeply value and appreciate all they have achieved on our behalf and are willing to continue to fight for them in the future—as they have fought and won for us."

***

Army Chief of Staff GEN Raymond T. Odierno delivered the keynote address at the Annual Meeting's Eisenhower Luncheon, and in his conclusion addressed the relevance of the U.S. Army.

"There are some who have interpreted our new national strategy as questioning the relevance of land forces," GEN Odierno said. "There are others who would wish away a decade's worth of hard-won sacrifice and expertise with false assumptions about the future. To them I say: Our Army was created 237 years ago to defend this great nation and to secure the interests of the United States abroad. That imperative has not changed. As I have watched the strategic environment evolve over nearly four decades in uniform, I have seen many of the characteristics of conflict change. Technology has advanced, new threats have emerged, and connections between people have increased exponentially. But through it all, the nature of conflict has remained constant. From countering terrorism to irregular warfare, from stability operations to humanitarian [response], when people are in trouble the United States responds. It is most frequently a U.S. Army soldier who arrives on their doorstep. Why? Because preventing conflict demands presence, shaping the environment demands presence, restoring the peace demands presence, and more often than not, that presence proudly wears the uniform of an American soldier."

Earlier in his speech, GEN Odierno said, "The strategic environment in which we operate is constantly evolving. Indeed, the character of conflict itself is changing, even as the nature of warfare remains the same. Around the globe, the balance of two superpowers has been replaced by an increasingly crowded international stage. Regional powers exert influence locally, often unconstrained by superpower influence. Strong social movements have successfully challenged long-entrenched regimes. Loosely affiliated groups, united often only by ideology, operate in ungoverned spaces on land and in cyberspace.

"Technological advances have revolutionized the way people and governments interact," he continued. "A wide variety of non-state actors can combine primitive tactics with advanced weapons to create instability in free societies and failing states. These actors do not replace the more conventional threats posed by nations such as North Korea, but they require the military to maintain a much broader range of capabilities to respond.

"Yet the fundamental nature of war remains the same. War remains a struggle to influence key terrain, populations and governance. Preventing conflict is better than reacting to it, and to prevent it you must understand its causes. But understanding in a lot of ways can only be gained through presence."

Although changes in the U.S. military are under way, the Chief of Staff spoke about the enduring missions that the U.S. Army will continue to undertake for the American people.

"Decisive defeat of any enemy on land remains our top priority," he said. "The Army represents one of America's most credible deterrents against future hostility. We prevent miscalculations from erupting into war, and we defeat an adversary when it does. No other nation can match the U.S. Army's ability to rapidly deploy large numbers of troops over extended distances, sustain them, and deliver precise, discriminate results. We must be prepared to take decisive action ourselves if necessary, but we must also set the conditions for our allies and partners to do so as well.

"In an increasingly complex and interconnected world,"

he continued, "the Army also plays a critical role in shaping the strategic environment. Our force has honed its tremendous skills not only in battle, but also quelling civil unrest, countering terror, demilitarizing former combat zones, protecting vulnerable populations and providing disaster relief."

"Finally," he said, "the Army is an indispensable provider to the Joint Force. Army commanders lead joint task forces, plan operations, and command and control units across the range of military operations. Army units build and operate the networks connecting our own units, the joint community, interagency and multinational partners on austere battlefields. Soldiers deliver food, fuel, ammunition, and medical support necessary to sustain joint operations from combat to humanitarian assistance. The Army collects and analyzes the intelligence that informs our actions and measures our progress. It delivers vital supplies to communities, at home and abroad, impacted by natural disasters. And finally, the Army provides 75 percent of the operators in U.S. Special Operations Command, who are essential to our national counterterrorism and security force assistance operations."

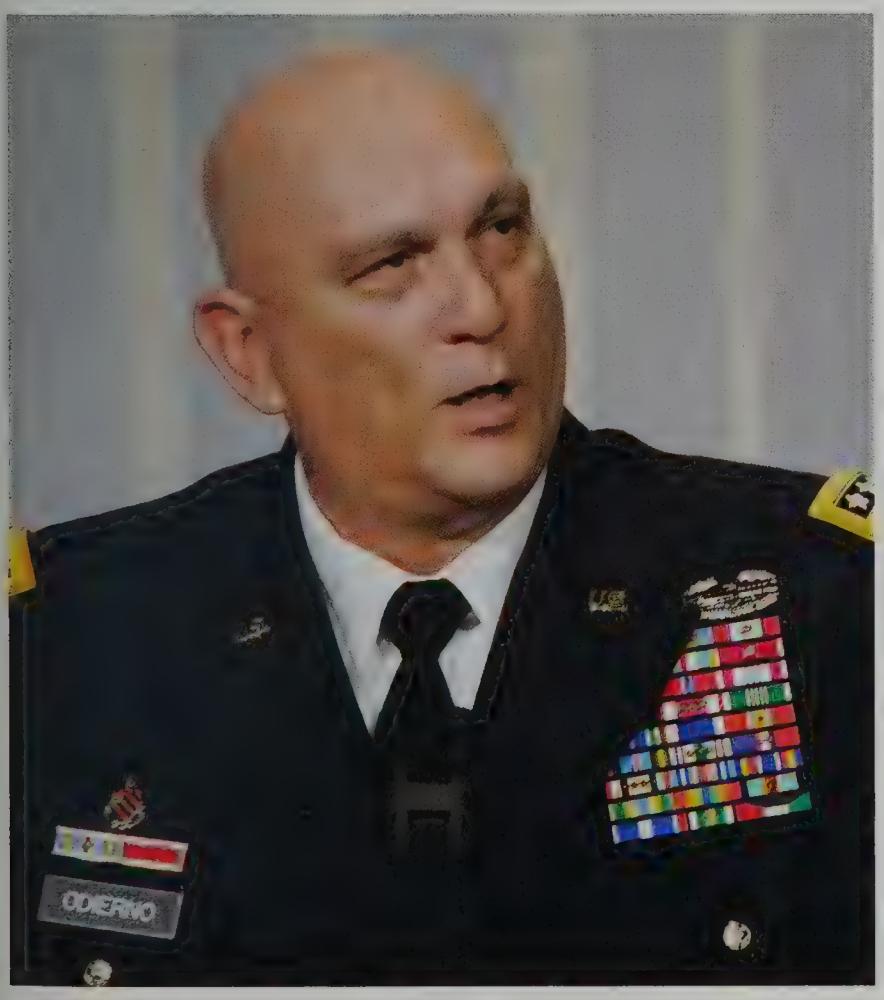
Looking to the future, GEN Odierno advised, "We must develop adaptive leaders and employ regionally responsive, mission-tailored strategic landpower forces to ensure our strength for tomorrow."

He added, "The successful conclusion of operations in Iraq and our ongoing transition in Afghanistan, as well as the significant fiscal challenges this country faces, make it essential that our Army reorients itself toward a broader array of missions and regions around the globe. Our ability to deliver truly strategic landpower, however, requires an improved understanding of the convergence of the human, cyber and geographic terrain in which we will operate. Today's global connectivity and its impact on a changing operational environment reinforce that lasting strategic results can only be achieved by effectively influencing people. Success depends as much on understanding the social and political fabric of the surroundings as it does on the ability to physically dominate them," he said.

"Throughout this period of great change, the Army stands ready to fight and win our nation's wars. However, we must be capable of doing much more to prevent conflict and shape the environment. Therefore, we must organize and employ our forces to be more agile and responsive to the needs of our combatant commanders. In the future, our forces must be tailored to local requirements, rapidly deployable at the lower echelons, and scalable from squad to corps level.

"As we move towards the future, our Army begins from a position of strength," he continued. "We have the most experienced and combat-ready force in our Army's history, and are considered by all [to be] the world's greatest landpower, which employs the most effective, discriminate weapon on the battlefield ... the American soldier. We must approach operational tasks by organizing our missions around highly trained squads and platoons that are the foundation for our company, battalion or brigade combat teams, organized for specific mission sets and regional conditions. No other service can provide the mix of forces, from heavy to medium to light, tailored to meet mission requirements. None can match the synergy that results from the close integration of our special purpose and conventional forces, particularly in the complex human dimension of modern conflict. And none can match the breadth and depth of experience provided by a balanced mix of active, National Guard and U.S. Army Reserve forces. We will leverage these strengths through the regional alignment of forces, providing the combatant commanders full access to the range of capabilities resident in the Army today."

GEN Odierno continued, "To truly become a force capable of engaging around the world also requires a modernization strategy that is centered on our soldiers and squad. We must empower them with unmatched lethality, protection and situational awareness to achieve tactical dominance. It entails an overarching network architecture that connects all echelons—from squad to joint task force—to ensure that leaders have the right information at the right time to make the best possible decisions, therefore enabling Mission Command. It includes network-ready combat and tactical wheeled vehicles designed to maneuver our formations with increased lethality and mobility, while optimizing survivability. In total, our modernization ef-



Army Chief of Staff GEN Raymond T. Odierno delivers the keynote address at the Eisenhower Luncheon, speaking about the missions and future of the U.S. Army, as well as modernization and remaining a versatile force.

AUSA's 2012 Annual Meeting and Exposition included 671 displays, welcomed more than 29,000 registered visitors, and offered numerous professional development programs for soldiers, their families, Army civilians and members of the defense industry.

forts will prepare the entire force for the complex and uncertain battlefield by putting squads with precise information and overmatch capability at the decisive time and place to achieve dominance of the operational environment. At the same time, we must preserve the ability to reassemble our forces rapidly, building the mass necessary to decisively defeat a determined enemy. In pursuing these goals, we ensure that we remain an Army capable of many missions, at many speeds, under many conditions."

***

Held at the Walter E. Washington Convention Center in Washington, D.C., over the course of three days in late October, the 2012 AUSA Annual Meeting and Exposition provided many programs for active and reserve component soldiers and their families and for Army civilian employees and members of the defense industry, in keeping with the meeting's mission as a professional development forum.

Among the programs that presented the views of some of the Army's top leaders, the Institute of Land Warfare hosted contemporary military forums in subject areas that included "A Versatile Force for the Nation" with LTG John F. Campbell, the Army's G-3/5/7, as the lead speaker; "Army Special Operations Forces and Conventional Forces: Partnering to Prevent, Shape and Win," led by LTG Charles T. Cleveland, commanding general of the Army Special Operations Command; "Enhancing Mission Effectiveness Through Power and Energy Advancements," led by Assistant Secretary of the Army (Installations, Energy and Environment) Katherine Hammack; "Thinking Past Tomorrow—Where Is Army Modernization Going?" led by Assistant Secretary of the Army (Acquisition, Logistics and Technology) Heidi Shyu; "Aligning Forces Regionally in Support of Combatant Commanders," also led by LTG Campbell; "Ready, Resilient and Army Strong," led by Vice Chief of Staff of the Army GEN Lloyd J. Austin III; "Defending the Homeland in Depth: America's Army Partners to Counter Transnational Criminal Organizations," led by LTG William B. Caldwell IV, commanding general of U.S. Army North/Fifth U.S. Army; and "Developing Leaders: The Key to Readiness, Sustaining the Profession, and Ensuring our Legacy," led by LTG David G. Perkins, commanding general of the U.S. Army Combined Arms Center and Fort Leavenworth, Kan.

More than 670 exhibits filled the convention center, and the meeting welcomed more than 29,000 registered visitors. The meeting was preceded by the annual Army Ten-Miler, which drew more than 30,000 registered participants.

The Annual Meeting concluded with the George Catlett Marshall Memorial Dinner, during which AUSA's highest honor, the Marshall Medal, was awarded to former Secretary of State James A. Baker III.

Secretary Baker, a former U.S. Marine Corps captain whose father was in the Army during World War I and whose son was an Army Ranger and honor guard at the Tomb of the Unknowns, said that whoever wins the 2012 presidential election "can and should draw important lessons from the life and the legacy of George C. Marshall. Let me suggest three such lessons:

"First, we must keep the United States militarily strong. … Our potential adversaries are decades, not years away from matching our global reach. … Nonetheless, we cannot become complacent when it comes to national defense. We have paid—and paid dearly—for a lack of preparedness … [and] we simply cannot let our military capabilities deteriorate."

He continued, "As challenges change, so must the way we address them. Given the shifting geopolitical landscape … it makes good sense to shift some of our focus and our resources from Western Europe to the Far East.

"Moreover, the overall defense budget is not written in stone. Given our current dire fiscal straits, defense will have to be on the table in any discussion of a grand budgetary bargain. This is not only a political reality; it will also be good for the long-term health of our military.

"Our ability to field the world's preeminent armed forces is dependent upon our economic strength," Secretary Baker noted. "You cannot be strong ... militarily or diplomatically if you're not strong economically."

He went on to say that the congressional impasse represents "a severe and growing threat to our military strength, to our defensive strength, to our very security."

While saying that given the present congressional crisis now is not the time to debate the wisdom of the invasion of Iraq or the ongoing operations in Afghanistan, Secretary Baker advised that those "interventions do demonstrate the risk of overstretch. The next President, whoever he is, should be very wary of wars of choice."

He continued, "A second lesson we can learn from Marshall: That's the importance of alliances. Marshall spent much of his effort as Army Chief of Staff and Secretary of State in creating and sustaining grand coalitions. He understood that U.S. power—though immense—was still finite. ... He realized that alliances could play a crucial role in advancing our national interests."

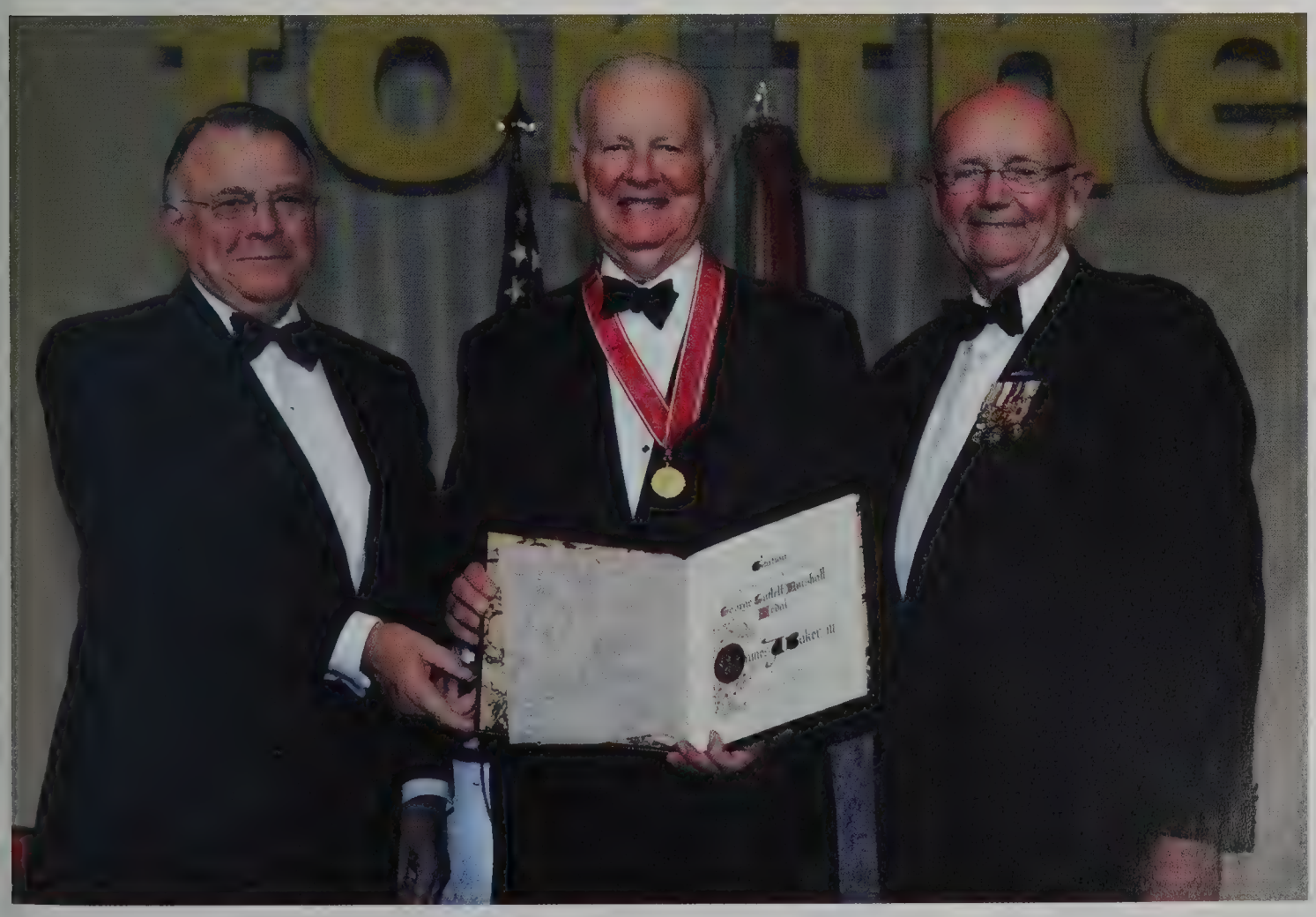
He added, "Of course we must be prepared—if need be—to act alone if our vital interests are at stake. But we should, where possible, seek allies. Cooperation can not only reduce the cost of action to the United States by sharing the burden with other countries, it can also serve to bolster support for international engagement. The American people are the final arbiter of foreign and security policy in the United States. You must bring the American people along behind the policy. If you lose the American people, you will lose the policy. So we must continue to do what we can to generate support for American engagement abroad. The American people, quite rightly, have little taste these days for going it alone when plausible alternatives do exist."

Secretary Baker said that, thanks to George C. Marshall, the United States enjoys "formal alliances of durability and strength. But we should be prepared to turn to more informal coalitions when circumstances demand them," he added. "We must be ready to form new coalitions to counter emerging geopolitical threats."

He said the third lesson from GEN Marshall is "the imperative of bipartisanship. We would be wise to recall that the two great accomplishments of his life—winning World War II and protecting Western Europe from Soviet aggression—were the products of bipartisan cooperation here in the United States," he said.

Secretary Baker said that "Marshall was more, much more than his achievements, as historic as they were. He was and is also a model for military officers and, indeed, all who seek a place of leadership in public life.

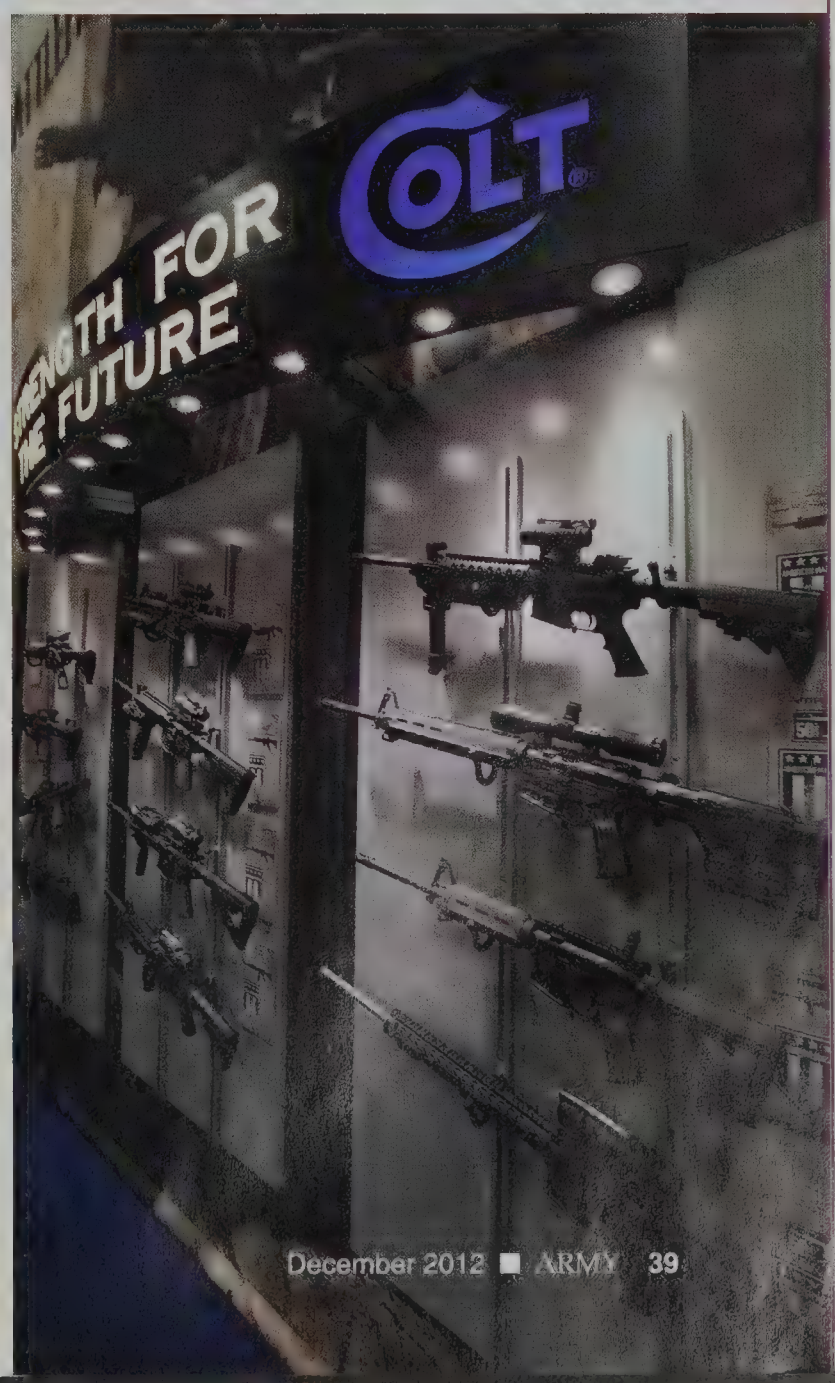
"Over 50 years after the end of his life, he remains the standard by which all Americans who claim to serve their country must be judged. Few, perhaps none of us, can meet that standard," Secretary Baker said. "But ... it is imperative that we learn the lessons of George C. Marshall's historic legacy, and it is just as important that we let his life of 'duty, honor, country' serve as a beacon as we navigate a period of uncertainty both abroad and here at home." ★

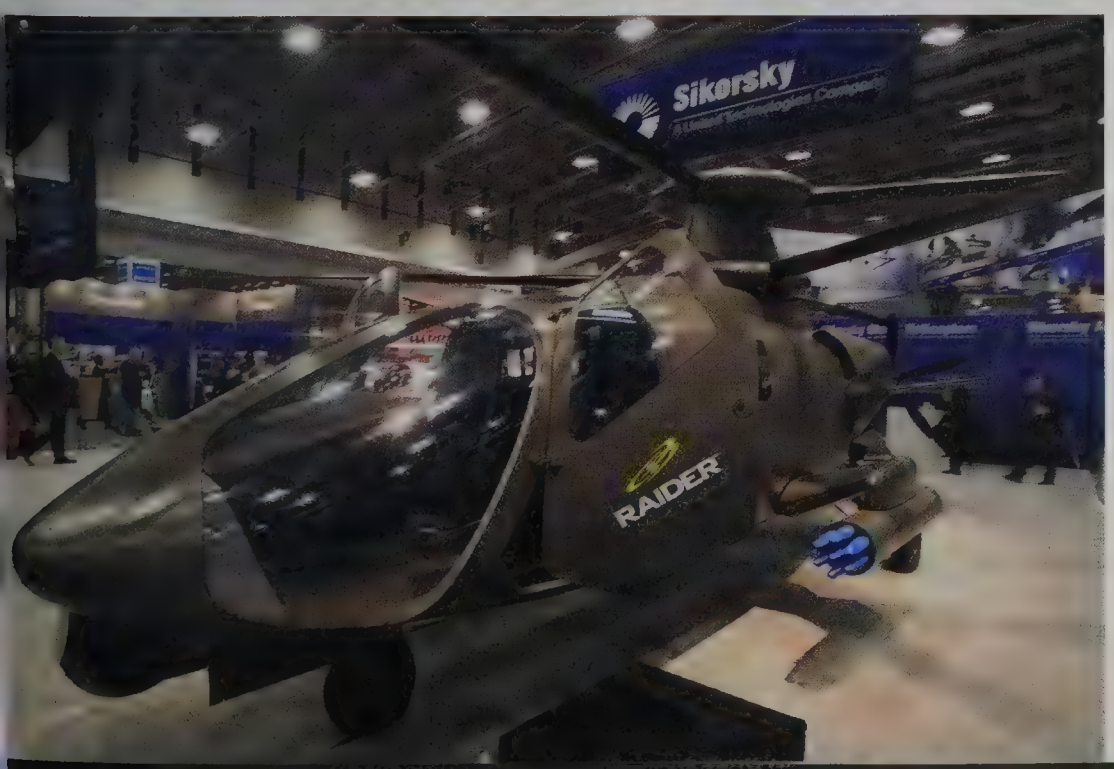


Nicholas D. Chabraja, chairman of AUSA's Council of Trustees, and GEN Gordon R. Sullivan, AUSA President, present the 2012 George Catlett Marshall Medal to former Secretary of State James A. Baker III. The Marshall Medal is the highest honor that AUSA awards.

2012 AUSA
ANNUAL MEETING AND EXPOSITION

Exhibit Hall





By Scott R. Gourley

MEDICAL

One rapidly growing aspect of Army medical care involves the use of medical simulation (MedSim) in the training of medical personnel at all levels—from initial combat lifesaving skills through multiple levels of hospital care, and in the development and maintenance of specialized medical proficiencies.

SPC Blanca Haag, below, simulates being treated for injuries during a recent training event at the Medical Simulation Training Center (MSTC) at Joint Base (JB) Lewis-McChord, Wash.

U.S. Army / Tawny M. Dotson

(Above, center) Soldiers practice combat medic skills on a computer-driven mannequin at the medical simulation center at Fort Drum, N.Y. (Opposite) Visitors from the Washington Corps of Military Attachés observe a Coast Guard class training at the MSTC at JB McGuire-Dix-Lakehurst, N.J., as part of an Army Reserve showcase hosted by the 99th Regional Support Command in May.

"There is really a growing body of evidence supporting the effectiveness of clinical medical simulation," says LTC Wilson Ariza, U.S. Army program manager for medical simulation. "That's because it not only improves proficiency but it also improves the performance of the health-care provider and improves patient safety. I think that's the key in telling this story."

Organized under the Program Executive Office for Simulation, Training and Instrumentation (PEO STRI), Ariza's team is at the

SIMULATION

forefront of emerging medical simulation technologies.

"Simulation improves the competence of the provider," he explained. "And it improves competence by providing a safe environment in which providers can practice as many times as they want. They can master those skills. They can practice different protocols, they can apply critical decision-making skills, and they can even develop communication and interpersonal skills."

According to Ariza, the current model in medicine involves a process that is commonly called See one, Do one and Teach one.

"Whether you are a medical student or a new provider you will first observe a medical procedure from a staff member," he says. "That's the 'See one.' Then you will most likely practice that procedure on a cadaver being supervised by a staff member once. That's it. That qualifies that provider to perform that procedure later on a patient, but that also means that a doctor who graduated from school today might not do the first one until 10 years down the road." Recognition of that fact has been an important factor in the rapidly expanding adoption of simulation in the medical field.

U.S. Army/Hannah M. Hayner

U.S. Army/SPC. Myra Michael Macleod

U.S. Army / Timothy Hale

Army Reserve soldiers work together to limit simulated blood loss of an injured patient during noncommissioned officer developmental training at the MSTC at Fort Bragg, N.C., where the NCOs refreshed their combat lifesaving skills in January.

MEDICAL SIMULATION TRAINING CENTERS

One critical early element of the U.S. Army's medical simulation program was the fielding of medical simulation training centers (MSTC). (See "Soldier Armed," ARMY, August 2006.) Today there are 23 MSTCs located worldwide, including six in Iraq and Afghanistan.

"That first one went into continuous operation in 2005 to support Operation Iraqi Freedom," Ariza recalled. "The medical simulation training center is a facility of about 10,000 square feet in which we have provided the sustainment training for all the EMTs [emergency medical technicians]—we call them combat medics—in the U.S. Army as well as the EMTs of any other service who were deploying to support Iraq and later on Afghanistan."

He added that the systems are also being used to educate medics, doctors, nurses and nonmedical personnel throughout the entire U.S. Army and the sister services.

In the case of nonmedical personnel, he said, "Let's say you have infantrymen deploying to Iraq or Afghanistan. They could be sent to the medical simulation training center where they will learn basic combat lifesaving skills. That's where MedSim has supported the tactical enterprise. Now we have a truly integrated training platform that deploys a very comprehensive training and education medical system using simulation."

LTC Ariza estimates that 40 percent of the current MSTC training mission involves combat lifesaver training.

"The emerging [MedSim] technologies provide training in what I call a low risk, supportive environment, where I can really recreate the nuances of patient care, whether in a hospital or a combat environment," he explained. "I can really identify and re-create it, and they can practice as many times as they feel they need to practice. Then later on I can do the training and I can even test to see if they've learned those levels of competency needed to save a life."

The wide array of simulation methods includes mannequins, human patient simulators and body-part task trainers.

"Training for a servicemember is normally 40 hours," he said. "The first two days are spent in a classroom, learning the curriculum and refreshing their knowledge. Through the classroom phase they also practice on part task trainers. For example, if they need to practice to start an IV in an arm, we have an IV arm trainer that is very similar to a human arm.

"Toward the end of the week, on the last day, we do what we call the Validation Day," he continued. "Using simulation we have re-created an environment in which they are going to walk into a location, a building like one we saw in Iraq or Afghanistan. It will include a combination of medical and nonmedical personnel, and we are teaching skills to both. The enemy will be there, so they need to engage the enemy and clear the room. Then they will find out that they have patients in there: friendly, friendly allies, and possibly even one of their own, who may become a patient. Now they need to apply everything they have learned, including tactical operations, to the trauma medicine aspects. While they are doing this, we are simulating the noise and we are even simulating the smells. Any provider will tell you that a wound has a distinct smell, so the ability to re-create that distinct smell in that chaotic environment adds to that realism. I am trying to re-create the trigger and the stress that they are going to encounter so when they first see that real environment they will have done it so many times that they can fully concentrate on trauma medicine."

LTC Ariza pointed to one relatively new simulator, developed in conjunction with industry and the Army's Research, Development and Engineering Command, that presents trainees with double amputee injuries. The simulator can be attached to a living role player to enhance the traumatic realism.

"What we were trying to do with that was to create that environment where a servicemember will have to block out some of those aspects to really concentrate on trauma medicine, applying the tourniquet, telling the soldier that he is going to be okay, and generally doing everything that he or she has practiced in the medical simulation training center to save a life," he said.

Scott R. Gourley, a freelance writer, is a contributing editor to ARMY.

Along with situations like traumatic amputations and other combat casualties, the simulation technology at the MSTC can be used to create unique crisis scenarios like heart attacks, hypothermia or other complex medical situations.

"You also have different degrees of combat chaos that can be added to the scenario. You can also add different scenarios that they might encounter later on. This is not just about Iraq or Afghanistan. Look what happened in Haiti not too long ago. We had a situation in which hospitals were destroyed or so full that they couldn't take any more patients," he said.

The state-of-the-art MSTC equipment also includes video scene recording.

"While we are videotaping, we let the servicemember go through the entire scenario. We do not stop the training; that's not realistic. We believe that learning occurs at the end of the session, which normally takes a good hour, when we go back into a room and play the video and point to any mistakes," he said.

"In this job as I travel to different locations around the world it is very reassuring when servicemembers tell me, 'I've been in combat and this is as real as it gets,'" he added. "In fact, it's so realistic that there have been some instances when we have triggered PTSD [post-traumatic stress disorder]. We're very careful of that now, and we have different medical personnel available in case anyone feels the need to talk to someone."

Asked about the incorporation of theater-lessons-learned into the MSTCs, Ariza noted the close cooperation across DoD and with entities like the Lessons Learned Center at the AMEDD [U.S. Army Medical Department] Center and School "at which we constantly have meetings to make sure that we capture those lessons learned from Iraq and Afghanistan and that they are incorporated into all of our 23 MSTCs. That's why we incorporated things like the simulator for double amputation, because we learned that was an injury that servicemembers were seeing and that we needed to re-create that environment.

"I'm a strong believer in knowledge management—being able to share those lessons that we have learned that will improve patient care and improve patient safety," he added.

"Going even further, that type of lessons-learned analysis has also triggered new equipment," Ariza said. "For example, when we realized—the 'enterprise' U.S. Army and DoD—that we were seeing a certain type of injury, people analyzed the data and came out with a new type of body armor that covered a lot more of the body."

Ariza highlighted a 2009 DoD Defense Health Board assessment of the types of training being conducted at the MSTCs as well as at other agencies.

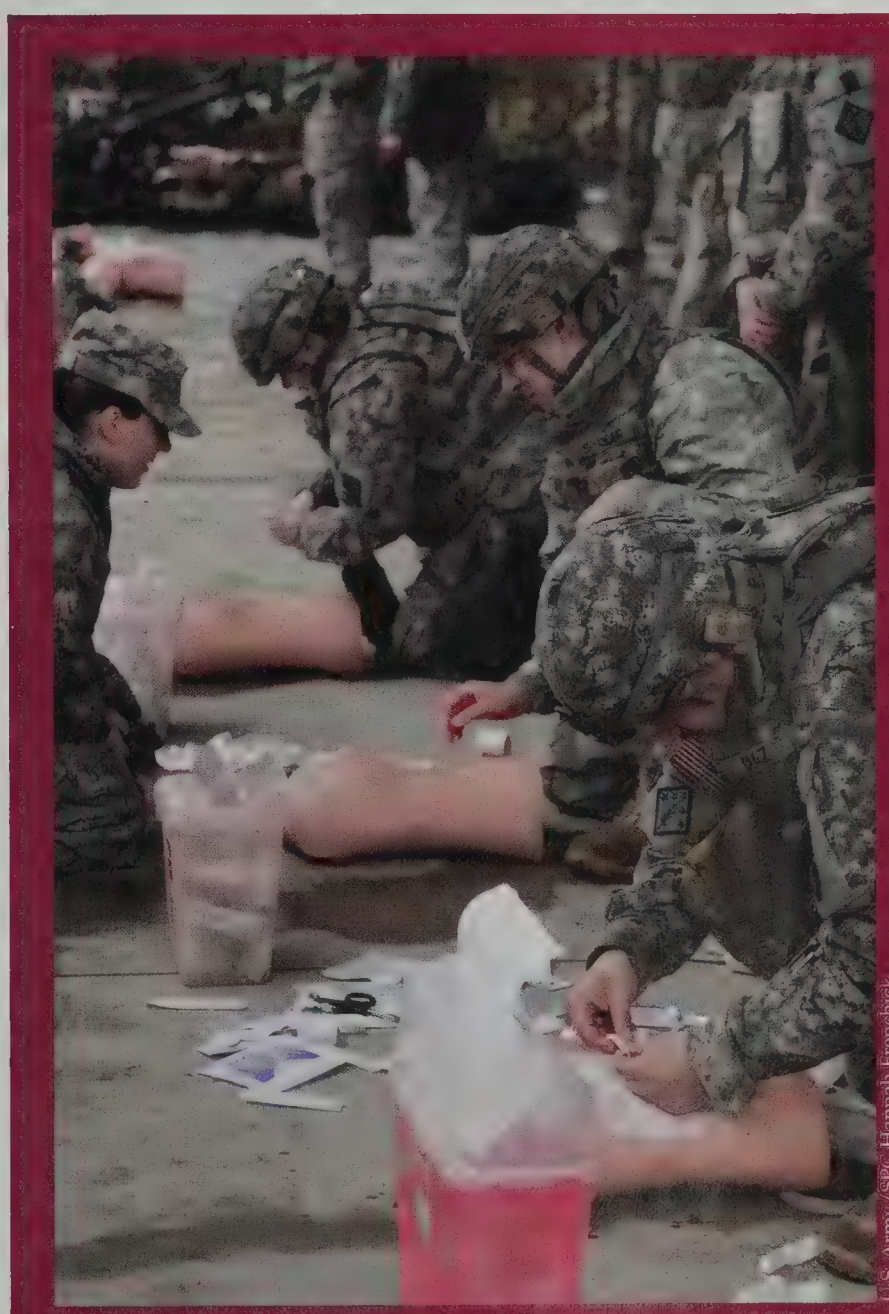
"The outcome of that Tactical Combat Casualty Care study is that at the time—more than three years ago—we had saved more than 1,000 lives," he said. "For my team and for myself, the fact that we can go home thinking that we had saved so many lives because of what we do here is a great feeling."

LEVELS OF CARE

Along with use at the MSTCs for first responder training, Army MedSim technologies are being applied across expanding areas of medical training.

"Medical simulation is no longer just for trauma medicine or first responders," Ariza says. "As you move that patient from the street in Iraq, Afghanistan or even Haiti, that patient then goes to the next level of care, which in this case may be the operating room after the emergency room. With simulation we are now able to recreate that same patient moving through the levels of care.

"We have been able to use simulations in hospitals not only to generate the emphasis of treatment but also the teams concept. When a patient gets into the emergency room or the operating room, there are doctors, nurses and other technicians, and it is critical how we communicate and work as a cohesive team. What simulation has done is to allow those providers in fixed facilities to also refine their communication skills, and we can do the testing to see how we work as a team," he said.



U.S. Army/SPC Hannah Frenchick

Soldiers with the 61st Chemical Company practice inserting chest needle decompressions at the MSTC on Joint Base Lewis-McChord during a Tactical Combat Casualty Course in March. Chest needle decompressions are used when a patient has tension pneumothorax, a leading preventable cause of battlefield deaths.

U.S. Army SPC Lauren Cook

SSG Teresa Greening (right), an instructor at the MSTC, Joint Base Lewis-McChord, conducts a needle chest decompression on a training mannequin as SGT Joshua Long applies a tourniquet. Training at the MSTC allows medics to retain their emergency medical technician certification with the national registry.

"We feel very proud that our simulations and training are credited with saving more than 1,000 lives, and also that all of the other services have been trained in our facilities. They want to see what we are doing so that they don't have to reinvent the wheel in their own training facilities," he added.

Another recent milestone was the signing of an interagency agreement by PEO STRI and Secretary of Veterans Affairs (VA) Eric Shinseki, which establishes PM MedSim as the acquisition arm for medical simulation across the entire VA system of more than 150 hospitals. Ariza credits the new arrangement with providing continuity of care for medical simulation equipment used across the Army as well as the VA system.

Other outreach efforts have created MedSim synergies with Florida's new Medical City at Lake Nona, Florida Hospital Nicholson Center, and University of South Florida Center for Advanced Clinical Learning and Simulation.

"We have now sent the message to the world that the central corridor of Florida has become the epicenter of medical simulation," he said. "I tell my team that we are being pioneers in this office in transforming the way that we practice medicine, not only in the military but in the world."

The Army's 23 MSTCs train an average of 120,000 individuals each year, and in the middle of 2012 the program passed the milestone of a half million people trained.

"That is just at the MSTCs," Ariza stressed. "That's not counting all of the VA providers and all of the doctors and nurses training with medical simulation in U.S. Army hospitals."

In terms of the growing embrace of medical simulation, he says, "It's very difficult to change a culture. We've been doing things one way for so many years, so why should we use medical simulation when we haven't done that before? It has taken a lot of effort to demonstrate the clear benefits so that now the entire medical enterprise—not only military medicine but also civilian medicine—incorporates medical simulation in their day-to-day operations."

Emphasizing a strong team effort, he pointed to growing outreach from his office across the Army as well as to other services "looking for the best type of simulator to fulfill a particular requirement."

"They are seeking advice as to what is the best prototype or simulator to fulfill a requirement," he said. "One mistake that is occasionally made is that a hospital may buy the highest end simulator when a simpler one will do. You don't need a complex simulator to teach a basic medical procedure. For example, you can use an IV arm part task trainer to teach starting an IV."

Asked about his vision for new technologies and the way ahead, Ariza offered his belief that "virtual technologies and long distance learning" will be vital to ensuring that medical providers stay current in an environment of fewer combat deployments.

"For the past 10 years we have had a large percentage of the force forward-deployed. So, although we were extremely busy, we had a balance. Now that more of the force will be coming home we must be able to continue providing them with the skills that they need to practice medicine, and we believe, from the simulation perspective, that virtual training and long distance learning will be key to be able to maintain those skills," he said.

"I've been forward-deployed many times," he concluded, "and everyone who is forward-deployed knows that if they become a casualty they will receive the best combat medical care known in the history of warfare. That knowledge enables many of us to accomplish any difficult mission under extraordinary circumstances. That's one of the biggest combat multipliers on the battlefield. Our warfighters know that we have the best-trained personnel and that we have given our providers the very best training and resources to take care of them if they become a casualty. They are surviving, and that's a great news story for those great Americans out there." ★

THE ASSOCIATION OF THE UNITED STATES ARMY'S INSTITUTE OF LAND WARFARE

9-11 APRIL 2013

HONOLULU, HI

LANPAC
SYMPOSIUM & EXPOSITION

LAND FORCES: ASSURING STABILITY AND SECURITY IN THE PACIFIC

A world-class international event highlighting the role of land forces in the Asia-Pacific theater in peace and war.

Be part of the discussion as Industry and the U.S. interagency team examine the essence of a whole-of-government approach to ensuring the nation's security.

TOPICS TO BE COVERED INCLUDE:

- Information warfare and cyber activities
- Leveraging training with technology
- Partnerships with nongovernmental organizations
- Humanitarian assistance and disaster response

SAVE THE DATE

Visit www.ausa.org for more information.

AUSA, Industry Affairs: 703.907.2665

Yan Huan

China Remembers

By COL John Easterbrook
U.S. Army retired

In early 1942, with the Japanese occupying all its eastern seaports, China was cut off from the rest of the world except for supplies that slowly made their way into the country over the torturous Burma Road. China sent forces into Burma, in conjunction with British forces in western Burma, to stop a Japanese invasion, which would close the road. U.S. Army GEN Joseph W. Stilwell was ostensibly in command of all the Chinese forces in Burma. In reality, however, the Chinese commanders would take orders only from Nationalist leader Chiang Kai-shek, then hundreds of miles away in Chungking. When defenses collapsed, China was cut off from all land and sea access.

Yan Huan

Stilwell moved remnants of two divisions of retreating Chinese troops to Ramgarh, India,

Hanh Easterbrook

GEN Stilwell's Soldiers

and began to refill, supply and train them. By late 1943, he led those two divisions on a campaign in northern Burma that, together with the U.S. force of Merrill's Marauders and British forces, captured the strategic town of Myitkyina in August 1944. Later, Chinese forces, again in conjunction with U.S. and British forces, attacked the south to reopen the Burma Road (later renamed the Stilwell Road) and force the Japanese out of Burma.

Clockwise from opposite top: A new memorial at Tengchong Cemetery, Yunnan Province, China, honors Chinese killed in the China-Burma-India theater during World War II. Urns containing the remains of 19 unknown Chinese soldiers returned from Burma were interred at the memorial in September. The author (right), below a photograph of his grandfather, GEN Joseph W. Stilwell, stands next to Yan Huan below a picture of his grandfather, General Pan Yu-kun, commander of the 50th Division of the Chinese Expeditionary Force. The U.S. China-Burma-India shoulder patch graces the front of the memorial.

Hanh Easterbrook

A headstone marks the crypt containing the remains of the 19 unknown Chinese soldiers returned from Burma for burial at the new memorial.

During those campaigns, Chinese soldiers killed in action were generally buried in designated cemeteries. None were ever repatriated to China. Over the succeeding decades, those cemeteries—lacking any maintenance—deteriorated.

Following the Chinese Civil War (1945–49) and the defeat of the Nationalist forces, history courses taught in China emphasized the contributions of the Communist forces in defeating the Japanese to the exclusion of the contributions of the Nationalist forces. The situation became even more one-sided during the Cultural Revolution, when references to or associations with Nationalist personnel were grounds for violence; even photographs and written records were destroyed.

In recent years, however, contributions of all Chinese soldiers and people during the war against Japan have started to become more visible, and the Chinese people have been interested in learning the facts that had been inaccessible for so long. Pride, too, is growing as information becomes more available on television, in print media and on the Internet. Today, recognition of all Chinese soldiers who contributed to the defeat of Japan and helped preserve the Chinese people and culture has greatly expanded.

In September, the remains of 19 unknown Chinese soldiers who served under the command of GEN Stilwell were returned from Burma and transported with dignity and ceremony under the former Nationalist flag to the city of Tengchong. Several hundred officials, including the U.S. Defense Attaché, Air Force Brig. Gen. David R. Stilwell (son of British General Francis Festing, whose division fought in Burma, but not a direct descendant of GEN Joseph W. Stilwell) were present for a moving ceremony at the Tengchong military cemetery. (See "The Tengchong 19" in the March 2010 issue of ARMY.) Brig. Gen. Stilwell's presence marked the first time an active duty American military officer had been in Tengchong since the late 1940s.

A newly constructed memorial to the Chinese Expeditionary Force (CEF) honors forces who fought in Burma plus the Chinese force, accompanied by American advisors, that attacked west from Yunnan Province to link up with the Chinese forces in Burma. The memorial consists of several imposing panels. The central memorial contains a bas-relief of a large force of Chinese soldiers and includes the American flag, the Nationalist flag and, in the center of the memorial, the U.S. China-Burma-India (CBI) shoulder patch. A bronze map of the CBI theater, annotated in Chinese and in English, is situated on the ground in front of the memorial. To the left of the central memorial are panels that list all the CEF general officers killed during the war, with a brief biography of each, and descriptions of the major battles fought by the CEF. To the right are panels that list the major units in the CEF, and a statue of a Chinese soldier of the period.

As the ceremony commenced, including remarks about the significance of the memorial, a slow trumpet melody grew in the distant rear. Soon a line of personnel, led by two men playing trumpets, approached the memorial. Behind them came a solemn procession of young men dressed in black and two abreast; one held a large white urn, the other an umbrella. The men aligned themselves on both sides of the central memorial during the unveiling, after which they filed around and behind the memorial and handed their urns to personnel who placed them in a crypt under a previously erected headstone. The 19 unknown Chinese soldiers had finally returned to Chinese soil, creating—perhaps in a small way—China's first "Tomb of the Unknowns." After the interment, all the invited guests came forward and placed a chrysanthemum on the central memorial in tribute to the fallen soldiers of the CEF.

***COL John Easterbrook**, USA Ret., has been involved in several projects promoting greater visibility of the U.S. effort in the China-Burma-India theater during World War II and to further U.S.-Chinese understanding.*

Hanh Easterbrook

An exhibit consisting of large reproductions of photographs of Chinese and American soldiers taken during World War II opened in another part of the Tengchong Cemetery. Some hang vertically; others are aligned in tent-like fashion in open areas.

Hanh Easterbrook

Soon, in another part of the cemetery, a photo exhibit of Chinese and American soldiers taken during World War II opened. A Chinese audio-visual team had spent two months at the U.S. National Archives reviewing thousands of photographs taken in the CBI theater. The exhibit consists of very large reproductions of photographs, some hanging vertically where space permitted, and others aligned in tent-like fashion in the open areas of the cemetery. At the opening ceremony Brig. Gen. Stilwell appropriately commented on the significance of the exhibit.

The day's activities culminated with a gala singing and dancing show in the city's open-air sports stadium. Approximately 10,000 people attended the production consisting of a cast of hundreds. It was the first time such a major production, with every segment devoted to the story of Nationalist soldiers and forces during World War II, had been performed in China.

The day's events, in conjunction with much media attention throughout China, speak volumes of the remarkable change apparent in the current atmosphere in China. For the first time, the remains of Chinese soldiers killed outside the country have been returned to Chinese soil. This gives recognition to the Nationalist Chinese soldiers who fought under GEN Stilwell and broadens the recognition of all Chinese soldiers who played a part in defeating Japanese aggression. It also provides the Chinese people with reminders of the American assistance to China during World War II and the cooperation and friendship that existed between Americans and Chinese during those years.

American veterans of the CBI have always been remembered warmly by the Chinese people and are treated with great respect when they visit China; this occasion only deepened those feelings. It is hoped that the events of the day will lead to more recognition for those soldiers who sacrificed their lives during the war, perhaps even spark interest in a national Chinese Tomb of the Unknowns and contribute to the appreciation for what America did for China during World War II. ★

Homestation Instrumentation Training System (HITS)

By Scott R. Gourley

Evelyn Burns

If all goes according to plan, the next few years will witness a dramatic increase in units stopping by their local training audiovisual support center and checking out new training kits that will significantly enhance the effectiveness of their home-station training opportunities.

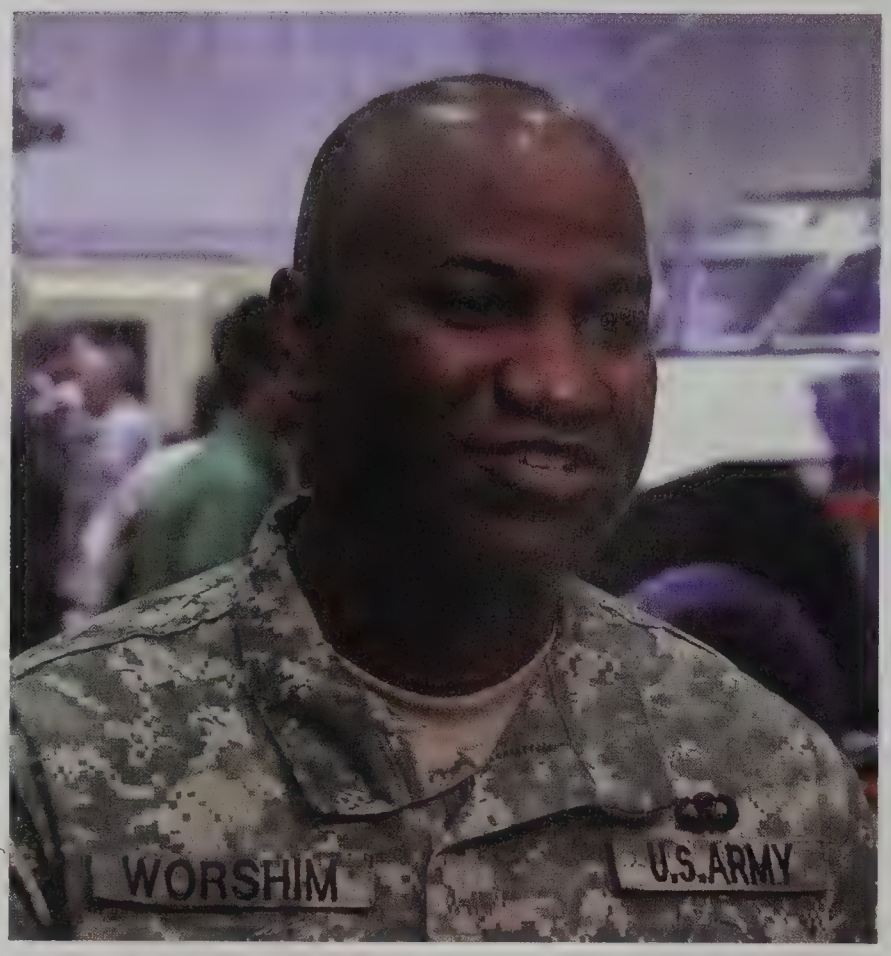
At least that's the vision of LTC Chuck Worshim, product manager for Combat Training Instrumentation Systems (PM CTIS), under the project manager for Training Devices (PM TRADE), within the Program Executive Office for Simulation, Training and Instrumentation (PEO STRI).

According to Worshim, the Army's Homestation Instrumentation Training System (HITS) represents a new program of record designed to introduce instrumentation into local live training events to enhance the impact of that training. Consisting of an Interim Range System (IRS), vehicle radio, soldier radio, field after action review (AAR) kit, exercise control and operator workstation, HITS supports collective maneuver training for platoon through battalion units.

Saab

Clockwise from opposite page: A soldier at Fort Hood, Texas, wears Homestation Instrumentation Training System (HITS) gear, which is used in live-training exercises. Saab is currently delivering the Live Training Transformation Interim Range System (LT2-IRS), the HITS interim communication system solution. During an annual bilateral exercise, soldiers from the 442nd Infantry and armed forces of the Philippines use Multiple Integrated Laser Engagement Systems, which tie into the Initial-HITS and offer review of training success or failure.

U.S. Marine Corps/Gy. Sgt. Matthew Holly



U.S. Army

LTC Chuck Worshim, product manager for Combat Training Instrumentation Systems, Program Executive Office for Simulation, Training and Instrumentation, says that HITS will enable home-station trainers to quickly evaluate the efficacy of individual training.

"For the last 20-plus years the CTCs [combat training centers] have always had an instrumentation capability," Worshim explained, "and that's one component of what makes them what they are: the ability of instrumentation to 'be the eye in the sky,' if you will, recording the movements and actions of soldiers on the ground. That information allows the Army to then come back during an AAR to let the soldiers know what they did wrong, what they did well, where they need improvement, what training they should sustain and how they should direct their training focus moving forward.

"In its simplest form, HITS, along with TES [Tactical Engagement System]—more commonly referred to as MILES [Multiple Integrated Laser Engagement System] Individual Weapon System—provides the ability for home-station trainers to conduct instrumented after action reviews by providing them with historical, factual data to show where units need to sustain or improve their training," he said.

Programmatically, Worshim pointed to the fact that HITS received its Milestone C full rate production decision in the past year, with subsequent fielding to both Fort Hood and Fort Bliss, Texas, before the end of fiscal year 2012.

Outlining the system operation, Worshim explained that HITS will interface with the whole family of MILES, including the new MILES Individual Weapon System.

Scott R. Gourley, a freelance writer, is a contributing editor to ARMY.

"With 'old MILES' you were basically able to play a 'laser tag game,' back and forth, with some audible sound that indicated someone was hit," he said. "That was the great essence of MILES—to control that battlefield. But now [with HITS] we have taken things a step further to say, 'I can take those actions on the battlefield and import them into an automated application that will now display to a soldier the battlefield locations and the firing lines from shooters to targets. That's something that you just didn't get before with MILES. You had guys walking around—OCs [observer/controllers] or trainers—saying, 'You're dead, you can't shoot,' and so forth." Now, he explained, events take place in real time. Later, following the "battle," soldiers can view on screen what actually took place.

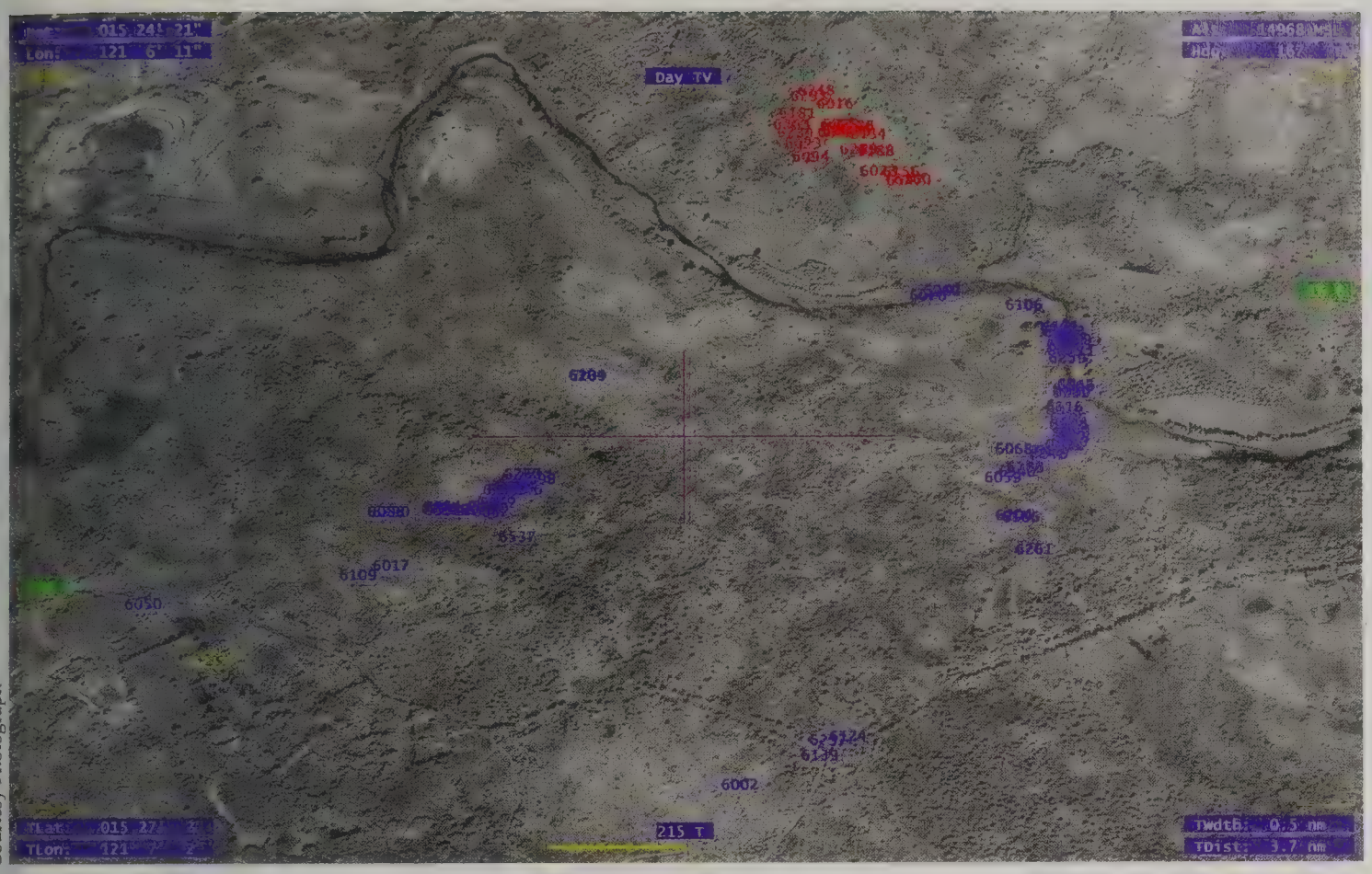
"That ability also helps to reduce some of the challenges you have when you're having training events and you have OCs trying to 'train' the unit by saying, 'This is what I saw; you did this,'" he added. "Well, sometimes you may have the [trainee] disagreeing, but HITS takes away all of that ambiguity because it will show you and play back what someone did or didn't do."

It will also provide that information to the field environment in a very rapid manner. With AAR response timing, for example, Worshim said that the HITS formal playback requirement is "within two hours" but could be significantly less "depending on what the trainer or the OC wants to see."

"The trainer is already talking to the [HITS] operator, who is helping him put together the AAR," he said. "The operator will already have a good rough cut of what that trainer is looking for—burned to a DVD. Basically the operator can verify that the images reflect the scenarios that the trainer wants to talk the unit through. Once that's confirmed, the DVD goes out with portable monitors that can be taken to the field location and played for the AAR. When I first got the time requirement of 'within two hours,' that was articulating or trying to judge time, distance and everything. HITS is normally centrally located at a place with training taking place in excess of 20 kilometers from that suite of HITS computers. So it's really [a matter of] how long it takes someone to drive out to that site.

"The HITS operators really build the AAR," he added. "They reflect what the trainers want to train that platoon or company on. So if a trainer just wants to show actions at the objective, for example, there is the potential that I could have those actions on the objective generated and burned to a DVD in 30–45 minutes. Then as quickly as that DVD could be handed off and inserted into a DVD player, you're seeing it right there on the monitors. So there's not a huge time delay. It's all dependent on what it is that's being trained and the actions the trainer wants the unit to take from it."

LTC Worshim continued, "The [beauty of] HITS is that you don't have to go through this extreme editing process to 'make something pretty.' It's bare-boned, in the field, and gives the AAR process as much factual data as you can give so that soldiers can go back and, if they have to do it again, do it differently so their buddy doesn't get killed."



Courtesy Photograph

A screenshot provided via the Initial-HITS during the annual Balikatan exercise in 2012 tracks the real-time movements of U.S. and Philippine soldiers (identified in blue) as they move to their objective. Enemy role players are indicated in red.

In addition, there is no prescribed concept of operations, meaning that the system can be used in any manner that helps enable unit training. That said, LTC Worshim was asked whether the recent fielding to Fort Bliss (in September 2012) might make HITS available for use as the Army makes the transition from Network Integration Evaluations (NIE) to Capability Integration Evaluations.

"I think we're really working with training systems as a whole and how they fit into the NIE," he replied. "I think we really have to peel it back and ask, 'Where does a training system fit in the NIE, and are we using that system to assess its [benefits] to the Army or are we using that training system to somehow assess what proposed product an industry partner might be bringing for evaluation?' But we have not cracked that code of where training systems fit into the NIE yet."

In light of the system flexibility, Worshim did offer one caution about potential applications of HITS. "I hesitate to say that the data is real time," he said, "because we don't want to have commanders standing over HITS operators, monitoring what Bravo Company is doing. We don't want that. That's not what HITS was built for. HITS was built for the historical record to support the AAR—not for a commander to control the battle."

Shifting his glance toward future fieldings, he said, "Over the next two years we're going to be fielding HITS to more sites. In the January time frame we are looking at fielding to Fort Campbell, Ky. Then in the March–April time frame we

U.S. Army

HITS will enhance any training mission, anywhere, down to an emergency carry completed by soldiers of the 18th Military Police Brigade based in Sembach, Germany. HITS fielded to Fort Bliss, Texas, in September and is slated for Fort Campbell, Ky., in January.

LT2-IRS represents a low-risk solution for future growth because it meets Army Mobile Instrumented Training System communication system requirements.

Saab

are looking at fielding Fort Drum, N.Y., and then in the July time frame we plan to field in Korea. I'm on a fielding schedule of about one HITS installation per quarter."

The sequential fieldings will also incorporate a number of enhancements to the HITS design.

"Some of the technology improvements that we are making with HITS include going to a virtualization of the suite of equipment," Worshim explained. "That will help to give HITS a smaller footprint, making it easier for the soldier. We are also putting in the newest technologies as we move forward in terms of both software and hardware.

"So if I were to call Fort Hood my grandfather system today, it is only that in terms of being big and bulky. If I look at Fort Campbell or Fort Drum, now I will say that I have the 'grandson' edition of HITS, but it still provides me with the same capability. It's just in a smaller footprint because of where we are with technology. … That will provide additional advantages, like reducing sustainment costs in the long term. As I get to my Version 3 of HITS I will go back and retrofit earlier versions, but I don't want people to lose sight of the fact that the capability is still the same, whether it's the bulky grandfather edition or the new grandson edition," he said.

In terms of industry participation, Worshim pointed to Saab Training USA (Orlando, Fla.) and EHS Technologies (Moorestown, N.J.) as "the two primes for the HITS subsystems right now. They are doing a great job, and they have delivered the capabilities that we have required," he said, adding that the program office is looking to recompete those contracts "in the 2013–2014 time frame."

Offering a takeaway message to warfighters, Worshim said, "HITS is a very powerful enabler for the commanders at all levels, battalion and below, to train their soldiers. It provides commanders with an incredible capability that is easy to use, and it will provide you with more data and information about the effectiveness of your training program than any other tools that currently exist at home station today.

"And part of that is that we are able to show a soldier at home station where improvements need to be made when he is conducting training for wartime mission or deployment to the CTC," he said. "The more preparation that we can give the soldier at home station the better that soldier is going to be prepared when executing at the CTCs or on a deployment. It's funny, but sometimes the things we remember best are not when someone is standing up or giving us a paper to read. Instead it's when you're looking at a video screen and realize, 'I am the dot on that screen and I was moving, standing up, when I was shot.' I need that soldier to play that back in his mind every time he goes to do that operation. I want him to realize that he needs to get into a prone position, because when he did it during home-station training he stood up and he got killed. When soldiers see that, it's a lot more powerful than having someone talking about why they need to be in the prone position."

His takeaway for commanders was equally direct.

"I want them to know that this is a new capability for home station," he said, "and I am convinced that once they use it and provide guidance to their subordinates on using it on live training events or field events, that they will see the [beauty] of what HITS offers. Once that word gets out that will be all that we really need, and they will see the capability, they will see how it improves the effectiveness of their training, and they will see how the potential exists for them to improve the survivability of their soldiers by how they are trained. You can't put a dollar value on that. It's something you have to see to believe, and you will know that you are better for having used the system. HITS will sell itself." ★

Never Underestimate Soldier Initiative And Common Sense

By MG Guy S. Meloy
U.S. Army retired

In March 1971, when the 1st Cavalry Division (Airmobile) redeployed from Vietnam to Fort Hood, Texas, it left behind a large brigade of about five infantry battalions and a field artillery battalion of 105 mm howitzer batteries commanded by then-LTC Carl E. Vuono, a sizable support organization, and many of its HU-1D "Huey" helicopters and Cobra gunships to continue fighting hard-core Viet Cong and elements of the North Vietnamese Army (NVA) in the Vietnamese Third Corps area. Designated the 3rd Separate Brigade (Airmobile), the stay-behind brigade was commanded by then-BG Jonathan R. Burton, the former 1st Cavalry's assistant division commander for operations and a superb battlefield commander. My battalion, the 1st Battalion, 12th Cavalry, was one of the infantry battalions assigned to the brigade.

The 12th Cav was located in War Zone D, almost an hour's helicopter flight from the brigade headquarters at Bien Hoa, near Saigon, and while I do not recall the exact locations of the other battalions, I do remember they were assigned to secure some of the most dangerous areas of operations (AOs) near Bien Hoa.

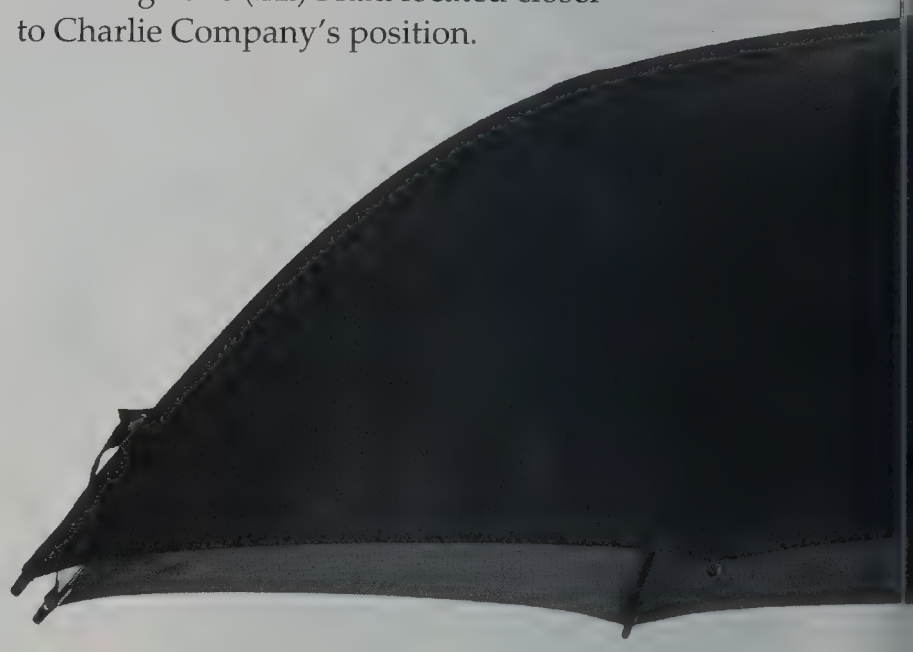
In June 1971, intelligence assets located the 33rd NVA Regiment approximately 50 kilometers east of Saigon. BG Burton ordered my battalion and the 2nd Battalion, 5th Cavalry, commanded by then-LTC Len Wishart to pursue and attack the regiment.

It was the height of monsoon season. Twice a day and at least once at night the rain came down so hard you could not see farther than a few yards, and it was a challenge to hear someone next to you talking. The AO had become mostly a marsh with very little dry ground anywhere. In short: miserable conditions, and raining so often that even our ponchos did not help.

After the brigade established our respective areas of responsibility, Len and I moved our battalions and accompanying direct support artillery batteries to the AO and started searching for the 33rd NVA Regiment. Our two battalions worked closely together, coordinating directly as we literally chased the regiment from one end of our AO to the other. We often found elements of this regiment on consecutive days and piled on with troops, artillery and helicopter gunships. Other times we might go as long as 24–48 hours without contact, as the 33rd was exceptionally adroit at escape and evasion, preferring to fight delaying actions rather than an extended battle.

On several occasions, if one or more of my rifle companies located and engaged the 33rd and if one or more of Len's companies happened to be closer to the action than my other companies, Len would "chop" one or more of his companies to my battalion to reinforce the fight. If one of my companies was closer to one of his companies in contact, I'd chop that company to Len. Over time, placing one or more of our companies under the operational control of the other battalion, and the cooperation between the artillery fire direction centers became so routine that our two battalions quickly developed reciprocal and smoothly effective SOPs (standard operating procedures). No matter the tactical situation, however, day and night all of us were usually wet to the skin. Life in the jungle is not much fun under any circumstances, but during a monsoon it's particularly miserable.

One morning at about 1100 my Charlie Company located a large element of the 33rd NVA. Given that they were heavily outnumbered, the best the company commander could do was keep the 33rd element fixed in place and coordinate artillery and gunships to reinforce his fires. In this case the nearest company (of either battalion) that could reinforce Charlie was my Alpha Company, commanded by then-CPT Jimmy Jones, a magnificent leader who never got rattled and had an intuitive sense of the best tactics to use in any situation. Because Jimmy's company was located almost 10 kilometers from the Charlie Company fight, I requested a gaggle of troop-lift helicopters to move Alpha Company to a landing zone (LZ) I had located closer to Charlie Company's position.



Alpha Company was located approximately 700 meters from the nearest possible pickup zone (PZ). The rate of movement in the triple-canopy jungle in the AO was 500–800 meters per hour even under the best of conditions—and these were not the best of conditions. By then, the "grunts" who had been searching for and fighting elements of the 33rd NVA Regiment on and off for three consecutive weeks while carrying a double basic load of ammunition, were bone tired and soaking wet.

I gave Jimmy an azimuth to follow, and about 45 minutes later he notified me that Alpha Company had reached the PZ. I had my command and control helicopter drop me off on the PZ as the first troops came in sight, sent it to refuel and then waited for Jimmy to arrive.

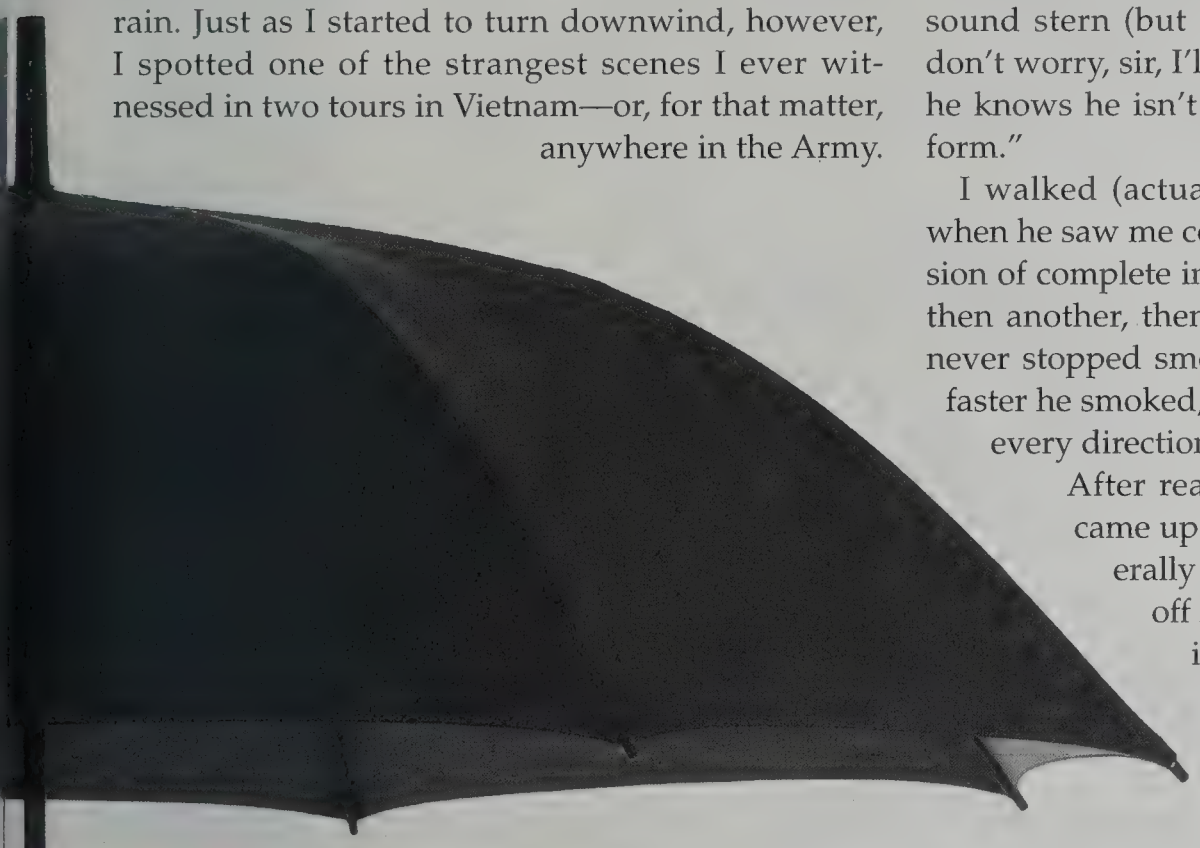
As the company came out of the jungle it hugged the tree line and assembled automatically into six-man Huey loads. Even with the heat of Vietnam, because of the rain, wet rucksacks and soaked jungle fatigues, the troops were shivering, and all the men had that "here we go again" look on their gaunt faces. As I stood in admiration of their pluck, I began briefing Jimmy. Standing together in waist-high, wet elephant grass near the edge of the jungle, I showed him on my map where we were located, where the LZ and Charlie Company's location were, gave him a situation report, and explained his mission and special coordinating instructions.

As we were talking, we suddenly spotted an early afternoon monsoon heading our way. The wind picked up, and as we looked to the west we could see a dark—al-

---

MG Guy S. Meloy, USA Ret., served in various command and staff positions over the course of his Army career. He commanded four platoons, three companies, two battalions—one for six months as a major, the second for 12 months as a lieutenant colonel, both in Vietnam—and a brigade. He was an assistant division commander and commander of the 82nd Airborne Division as well as director of training in the Office of the Deputy Chief of Staff for Operations and Plans.

most black—wall of rain coming toward us. As it got closer and closer, the noise of the wind grew louder and stronger. When it finally reached our location, the troops (and Jimmy and I) instinctively tried to push our shoulders up beneath our helmets and like a herd of cattle turned our shivering backs to the hard-driving rain. Just as I started to turn downwind, however, I spotted one of the strangest scenes I ever witnessed in two tours in Vietnam—or, for that matter, anywhere in the Army.



To digress for a moment: During my first days as a West Point cadet I had attended a series of lectures explaining customs and traditions of the Army. Among other things that seemed to be emphasized again and again was that, regardless of rank, anytime they were in uniform soldiers were never to carry a baby or an umbrella, and if they did they would most likely be dismissed from the service. I wasn't altogether sure why some of these were customs, but by the time the lecture series was over I well understood that all soldiers of all ranks were expected to follow them, or else.

As Jimmy and I started to turn our backs to the approaching monsoon, I saw a young soldier suddenly reach into the back of his rucksack, pull out a small folding umbrella and snap it open. Then as the rain began falling so hard it hurt, he casually reached into his jungle jacket pocket, pulled out a cigarette, lit it, and calmly started smoking as the rain cascaded off his umbrella. I was so surprised I had to blink my eyes a few times to be sure I had seen what I thought I had. It was such an incongruous sight that at first I thought I must be hallucinating. Exhausted soldiers had been living day and night in the jungle for three wet-to-the-skin weeks and eating only cold C-rations, rain pouring down in sheets, and suddenly one of them reached for what might have been the only umbrella in the U.S. Army and calmly stood in the thick jungle smoking a cigarette as if he didn't have a care in the world.

I turned to Jimmy and asked, "Did you see that?"

Flinching just a bit, Jimmy replied, "Yes, sir, I'm afraid I did." Then, with an ear-to-ear grin and doing his best to sound stern (but not exactly succeeding), he said, "But don't worry, sir, I'll take care of him later because I'm sure he knows he isn't supposed to carry an umbrella in uniform."

I walked (actually sloshed) over to the soldier, who, when he saw me coming, immediately assumed an expression of complete innocence—looking first in one direction, then another, then at the ground, but never at me—and never stopped smoking his cigarette. The closer I got the faster he smoked, and the more often he began looking in every direction but the one I was coming from.

After reaching his position I leaned down and came up inside the umbrella, which placed us literally nose to nose. As the water kept dripping off my helmet, I suddenly realized how nice it was to be under his umbrella and not getting soaked. After a moment of staring at me with what was obviously (and understandably) panic, he gulped, to my astonishment forced a smile and, as casually as he could, said, "Good afternoon, sir, how are you today?"

I started to instinctively reply, "I'm fine, thank you," but realized that under the circumstances that was probably not what you might call an appropriate answer. Instead I asked, "Soldier, where did you get this umbrella?"

Looking as guilty as if he had just been caught robbing a bank, he gulped again and told me (and this is verbatim), "Sir, my mama sent it."

I did a double take and said, "Your mama? Really? Why did she do that? Did you ask her to?"

He said, "No, sir, but I've been in Vietnam less than a month and it's rained every day and seems like most of the night, too, so I wrote home. I told my mama, 'Boy, it sure does rain a lot over here.' A week later I got a box from home and she had sent me this umbrella. I've been carrying it ever since in my 'ruck' so it's handy when it starts raining again. They told us in basic [training] that soldiers aren't supposed to carry umbrellas, but being in Vietnam where it looks like it rains all the time, I thought maybe it might be OK."

We were still nose to nose, but it was all I could do not to start laughing. It was also all I could do not to shake his hand, congratulate him for his good sense, and to tell him to tell his mama she had outmaneuvered the entire U.S. Army.

As I started to duck back out from underneath his umbrella, in a hesitant voice he asked, "Sir, am I in trouble?"

I put my hand on his shoulder and replied, "No, trooper, you aren't in any trouble at all; as a matter of fact you're probably the smartest soldier in Vietnam. Don't tell anyone, but I'm thinking of asking my wife to send me one, too." ★

Historically Speaking

Fredericksburg at 150

By BG John S. Brown
U.S. Army retired

December 13 marks the 150th anniversary of the Battle of Fredericksburg, a bloody repulse for the Union. The battlefield, not far from Washington D.C., is unevenly preserved. Some parts, including the Fredericksburg and Spotsylvania National Military Park, maintain enough of their original character to allow the visitor to envision the battle. Elsewhere, suburban development has overtaken the landscape. The campaign itself is too often solely remembered for the botched assaults that marked its terminus. This is unfortunate because it also witnessed an operational concentration of forces and an assault river-crossing that did considerable credit to the reputation of Union arms.

A statue of Union BG Andrew A. Humphreys stands near the entrance of the Fredericksburg (Va.) National Cemetery, which now occupies a section of Marye's Heights on the Fredericksburg Battlefield. BG Humphreys' 3rd Division, 5th Corps, made the last major assault against the heights on December 13, 1862. Confederate defenders occupied positions along a sunken road and were protected by a stone wall. They mowed down wave after wave of Federal troops attacking the heights. A portion of the wall, pictured here, has been rebuilt, using the original stones.

Photographs by Dennis Steele

A memorial commemorating the compassionate actions by Confederate SGT Richard Rowland Kirkland is the centerpiece of the Marye's Heights battlefield. Wounded soldiers littered the field in the aftermath of the battle. When SGT Kirkland could not stand the men's moaning and pleas any longer, he gathered canteens and, under no truce, went among the wounded to give them a drink.

In the September issue we discussed the bloody Battle of Antietam and Confederate GEN Robert E. Lee's withdrawal from Maryland in its aftermath. President Abraham Lincoln encouraged Union GEN George B. McClellan to launch a vigorous pursuit, but McClellan dithered through the fine October campaign weather with organizational and logistical preparations. Lee built his effective strength back up to 85,000, whereas McClellan had 120,000 on hand. To add to Union embarrassment, Confederate MG J.E.B. Stuart rode around McClellan's entire army with 1,500 cavalrymen, wreaking havoc as he did so. When McClellan did move he seemed anxious, dilatory and not in pursuit of any apparent plan. By November 7, Lincoln had had enough and relieved McClellan in favor of MG Ambrose E. Burnside. Burnside had demonstrated capacity for independent command in amphibious operations along the North Carolina coast, had served loyally and well as a corps commander, and, unlike McClellan, had no political ambitions.

Burnside quickly developed a plan that was forthright, feasible and practical, if not particularly imaginative. Despairing of sustaining a deep thrust along the rickety rail line running through Manassas and Culpeper, Va., in the face of such envelopment artists as Stuart and Stonewall Jackson, Burnside proposed to shift his main railhead east to Aquia Landing on the Potomac River. From that point a robust rail line ran due south to Richmond, about 60 miles away. Like others before him, Burnside believed an advance on Richmond would force the decisive battle of the war. A downside of Burnside's more direct approach was the rivers in the way, most notably the Rappahannock. Burnside's preferred rail line crossed the Rappahannock at Fredericksburg, but the river was about 400 feet wide at that point. Undaunted, he resolved to muster a pontoon train to support him and to conduct assault crossings of the Rappahannock and subsequent rivers if need be.

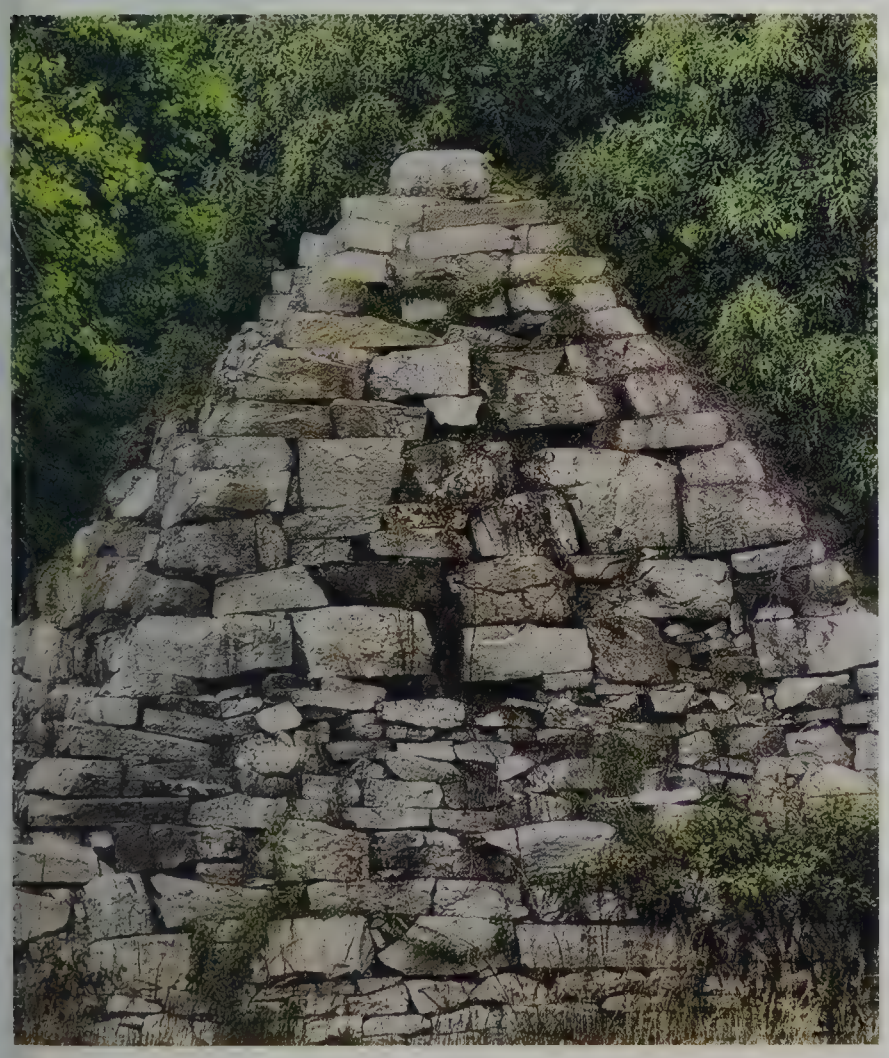
Burnside arrived at Falmouth, on the north bank of the Rappahannock, on November 17. His subordinates, correctly ascertaining that their shift of axis had achieved surprise, urged an immediate crossing even though the pontoons had not yet arrived. Burnside feared that rising water from anticipated rains would close the river behind whatever force he pushed across and preferred to await the pontoons to ensure reliable communications. Ironically, Lee was resigned to giving up Fredericksburg and retiring to the North Anna River had Burnside crossed the Rappahannock before the Confederates could concentrate in front of him. Awaiting pontoons, Burnside missed several opportunities to cross without them or to attack a fragment of Lee's army as it maneuvered to, and built up around, Fredericksburg. When Burnside was finally ready to conduct his assault crossing on December 10, the entirety of Lee's army awaited him.

Burnside forded the Rappahannock with a river-crossing operation of unprecedented scope and sophistication. Hundreds of artillery pieces lined the heights along the north bank, prepared to pour fire on all who opposed the crossing. Balloons hovered overhead to conduct reconnaissance and coordinate fires. Engineers took maximum advantage of fog and darkness to assemble pontoon bridges and push their ever longer snouts across the river. When Confederate snipers that had burrowed into Fredericksburg interfered, Union volunteers rowed pontoons across to flush them out. Impressed with all of this, Lee held back, aligning on Marye's Heights and ridges extending southeast from them rather than hazarding a close-up fight under the Union artillery umbrella. Lasting the better part of two days, Burnside's methodical crossing operation poured about 100,000 soldiers across the river. Half a dozen pontoon bridges stood intact to sustain them and to permit further reinforcements.

***BG John S. Brown**, USA Ret., was chief of military history at the U.S. Army Center of Military History from December 1998 to October 2005. He commanded the 2nd Battalion, 66th Armor, in Iraq and Kuwait during the Gulf War and returned to Kuwait as commander of the 2nd Brigade, 1st Cavalry Division, in 1995. He has a doctorate in history from Indiana University. His book,* Kevlar Legions: The Transformation of the U.S. Army, 1989–2005, *was published in 2011.*

Unfortunately for Burnside, his superb river crossing had deposited his army into a bowl facing up into ridgelines bristling with Confederate troops. Numbers and firepower favored the Union forces already across on December 13, but broken terrain and leadership failures led them to conduct uncoordinated assaults against an enemy well positioned to receive their attack. By one count, seven Union divisions conducted 14 separate charges against Marye's Heights, generally attacking a brigade at a time. On the Union left a single division broke through, only to be summarily expelled when other divisions failed to adequately support it in the face of counterattacks. Repeated assaults met the same unhappy fate, each leaving behind a residue of dead and wounded along the front of the Confederate line. Union casualties totaled more than 10,000, those of the Confederates about 5,000. Burnside wanted to resume the assault on the 14th but was talked out of it by subordinates horrified by their losses. A truce allowed both sides to bury their dead. Over the night of the 15th, the Union troops skillfully withdrew, getting all troops and supplies back across the Rappahannock by stages and then pulling the pontoon bridges in behind them. A subsequent attempt to march around the Confederate left flank, the infamous Mud March, disintegrated in heavy rains. Lincoln relieved Burnside on January 25, 1863.

Artillery pieces on Fredericksburg National Battlefield Park denote the location of Confederate guns on Howison Hill. From this position, the guns joined artillery positioned on Lee's Hill to pummel Union forces.



In the early 1900s, a pyramid of stones was erected along the railroad that cuts across the Fredericksburg Battlefield to mark the approximate position of an attack by MG George G. Meade's men on the flank of Marye's Heights against Confederate troops under LTG Thomas J. (Stonewall) Jackson.

Burnside and his army proved both technically proficient and courageous. Unfortunately for them, having a hammer does not make every problem a nail. Mindful of the obstacles in his chosen attack axis, Burnside mustered the equipment and mind-set to conduct a massive assault river-crossing. He passed up opportunities to achieve success in other ways while mustering the resources necessary for the plan of action he had committed himself to. In the end he conducted an unprecedented and thoroughly modern operation to cross the river, only to have Lee's dispositions render this success irrelevant. It is not enough to conduct each phase of an operation well. Each phase must lead sensibly into the next, and the entire sequence must end in the achievement of a decisive objective. For Burnside that objective started out being Richmond and ended up being crossing the Rappahannock. For Lee the objective was always the decisive defeat of the Union army. ★

Recommended Reading:

Esposito, Vincent J., *The West Point Atlas of American Wars, Volume I: 1689–1900* (New York: Frederick A. Praeger, 1959)

Foote, Shelby, *The Civil War, A Narrative: Fredericksburg to Meridian* (New York: Random House, 1963)

McPherson, James M., *Battle Cry of Freedom: The Civil War Era* (New York: Oxford University Press, 1988)

Williams, T. Harry, *Lincoln and His Generals* (New York: Gramercy Books, 2000)

Under the patronage of His Excellency Sheikh Khalifa bin Zayed Al Nahyan
President of the UAE & Supreme Commander of the UAE Armed Forces

17-21 February 2013
ADNEC, Abu Dhabi, United Arab Emirates

IDEX ايدكس 2013

DEFENCE TECHNOLOGY FOR THE FUTURE.

The Middle East and North Africa's largest defence and security exhibition returns to Abu Dhabi in February 2013. Where the global defence industry will meet influential VIP's, decision makers, military personnel and key investors at IDEX 2013.

To book an exhibition stand or outside space email info@idexuae.ae

For detailed information about IDEX 2013 visit www.idexuae.ae

Headline Sponsor: TAWAZUN تـــــوازن

Organised by: ADNEC

In association with: UAE Armed Forces

Co-located with: NAVDEX NAVAL DEFENCE EXHIBITION 2013

CompanyCommand

Building Combat-Ready Teams

To: Company Commanders
From: Company Commanders

Afghan Partnership 2012

The 1st Brigade, 82nd Airborne Division (TF Devil) deployed to Afghanistan during Operation Enduring Freedom (February 2012–September 2012), where they conducted counterinsurgency operations in Ghazni Province. A number of company commanders have taken the time to capture some of our experiences and lessons learned. Because a significant part of our mission included partnering with our Afghan counterparts, we chose to focus this article on that topic. For a broader view of our experiences and lessons learned, please check out the CompanyCommand forum (http://CC.army.mil).

Pete Anzovino

B/3-73 CAV

As the deadline for coalition withdrawal from Afghanistan draws closer, more and more emphasis will be placed on the capability of the Afghan National Security Forces [ANSF]. Are they capable of continually defeating the Taliban and insurgent networks while simultaneously providing security and stability for the people of Afghanistan? Will they be ready in time?

My troop partnered with an Afghan National Army [ANA] rifle company along Highway 1 in Ghazni Province. My ANA company commander seemed eager to work with us and immediately invited me and my scout platoon to follow his company on a presence patrol to a local village about 10 kilometers south of his outpost. As I walked the patrol with him that day, my platoon remained in a security posture on the far outskirts of the village. The ANA made it obvious on that first combined operation that they were already capable of planning and executing localized operations at the company level.

This ANA company had no previous long-term partner, yet they were already at an acceptable level of independent operation. They displayed the ability to execute joint operations with the local Afghan uniformed police, and on multiple occasions conducted unilateral operations without our support and did not inform us until the mission was completed. I attribute this in large part to their lack of a sustained partnership with International Security Assistance Force [ISAF] units over the years. Once my troop entered the equation, however, the company commander naturally tried to see what additional resources we were willing to provide. He seemed to know just how far he could push me with his requests for generators, furniture, boots, fuel, etc.

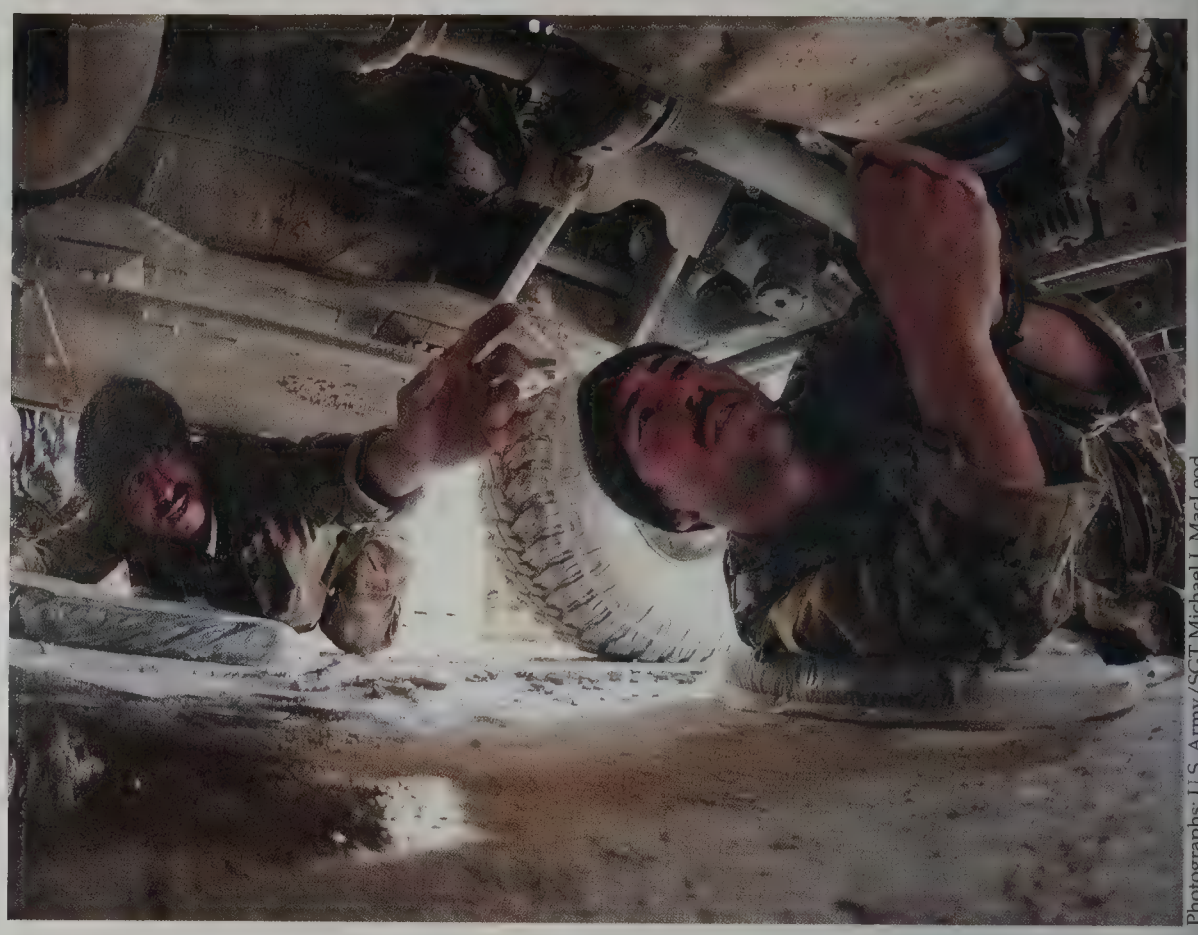
Many ANSF units are capable of operating independently right now. Years of partnered training and missions have greatly enhanced their capabilities, but as long as the coalition remains, there will always be the temptation to default to them for resourcing and support. The sooner ISAF disengages from the ANSF, the sooner they will be forced to develop and exercise their own systems.

Trent Talley

B/2-504 PIR

Living 24/7 with host-nation forces on a company-sized base proved difficult at times and was constantly a focal point for security measure consideration. The interaction with ANA soldiers was a constant balancing act of training, patrolling and daily life on a combined outpost. Though our combined defensive plans focused on the threat outside the wire, the possibility of an insider threat was always in our minds. Each day, troopers from my company stood guard alongside the ANA as well as the contracted Afghan security guard [ASG] forces. All were armed and wearing kit, providing security along the perimeter and for the entrance to our combined company-sized outpost. They interacted on a soldier-to-soldier level, telling stories of fighting, talking of family and friends, and some becoming friends themselves. Each night I would have a leader huddle with my key subordinate leaders, the ANA company commander and his executive officer. We would discuss future missions, make final preparations for the next day's mission and share ideas on how to plan effectively. These nightly conversations built relationships and helped us all learn and be more effective.

Late one August morning, a disagreement between the ASG and the ANA resulted in one guard with a broken nose and an ANA soldier with four staples to the head. The situation was exacerbated by the fact that it was Ramadan, and the Afghans were tired and hungry from fasting. The ANA



Photographs: U.S. Army/SGT Michael J. MacLeod

A driver with the Afghan National Army's 6th Kandak *assists another driver in repairing a Humvee. The soldiers are getting lessons in preventive maintenance from mechanics with the 307th Brigade Support Battalion.*

tried to swarm the ASG section of the base. My troopers and I stepped between the ANA and ASG and attempted to reason with them. There was no reasoning with the frustrated ANA, though, and the situation escalated to the point that ANA forces drew weapons on their American counterparts—my men, who had fought and bled alongside them.

The situation was at the brink of a catastrophe. A few other leaders and I told our men to move back to the opposite side of the Hesco wall that separated the U.S. side from the Afghan side. Although withdrawing, my men placed themselves up on the wall and remained in a position to support their leaders if weapons fire erupted. The ANA finally began to see that we were lowering our weapons and no longer trying to match their level of aggression. It took making ourselves vulnerable by turning our backs to them to calm the ANA down.

Though our partnered activities resumed after this incident, the level of trust was never the same. We withdrew Americans from the entry control point, posted guards near the entrance to the operations center and moved the ASG to our side of the base, where they would continue living for the remainder of their stay on the base. A short while later, we removed the ASG from the base entirely to prevent any future situations from developing.

For me, this incident highlights the importance of discipline and standards. Had one of my Soldiers fired a round, it could have jeopardized our mission and turned into an international incident.

Jared Larpenteur
D/2-504 PIR

The greatest challenge that my company faced during operations in Ghazni Province, Afghanistan, was partnership with the ANSF. We deployed to an area that had not seen heavy ISAF partnership in more than five years, and so our assumption going in was that the ANA would not be well-trained.

Upon arrival in theater, my company partnered with the heavy weapons company of the 6th *Kandak*, 3/203rd Corps. We quickly realized that they were more trained than we had anticipated. The problem, however, was that they were reluctant to patrol with us and were not as well-disciplined, especially on long-range patrols that were two and three days long. During these patrols, in patrol bases at night, they would play music and smoke cigarettes. We would tell them to stop, which had an immediate positive result, but 15 minutes later the music would start again.

We spent every day doing some type of partnered activity. Those days that we did not have scheduled patrols we

A U.S. Army lieutenant with the 1st Brigade Combat Team greets his Afghan army partner before their soldiers patrol together.

SPC Louis Morales, a mechanic with the 307th Brigade Support Battalion, explains to Afghan National Army drivers how to properly read a dipstick during preventive maintenance.

would go and hang out with the ANA, share meals, play games and so on. By doing this, we got to know them better and realized that the problem was that the ANA felt they were good enough to lead their own patrols and did not need our assistance. We stepped back a bit and shifted to focus more on skills that would allow the ANA leaders to better plan their patrols. We taught them troop-leading procedures and the OPORD [operation order] process, focusing initially on how to read maps and plan routes according to terrain and threat analysis. Developing relationships and our shift in focus created a positive connection. The ANA leaders became more capable and confident. Not only that, but there was a significant increase in motivation and discipline during patrols.

Our partnered ANA clearly enjoyed being in the lead. Respecting them and establishing a relationship opened up the opportunity for us to better understand them and make an impact.

Nicholas Carelas
B/307 BSB

My company was assigned the task of teaching the 6th *Kandak* how to properly maintain their vehicles—mainly old U.S. Army M1151 up-armored Humvees and Ford Rangers. Their operational readiness rate for the vehicles when we arrived was below 30 percent; barely one in five vehicles functioned. They basically used their equipment until it broke, and then it just sat there. The ANA mechanics didn't have the training they needed. Case in point: one mechanic poured engine oil into a radiator—not maliciously, but because he really didn't know.

Working with the security force assistance team [SFAT], we conducted key leader engagements with the *Kandak* S3 and HHC [headquarters and headquarters company] commander. We found out that their maintenance bay was being used for storage. Once the ANA cleared that up, we executed our first class with 10 ANA soldiers. Our focus was to instruct them on preventive maintenance checks and services [PMCS] as well as common 10- and 20-level tasks on the M1151 and the Ford Ranger. The first obstacle we encountered was the high illiteracy rate. ANA soldiers were very smart and caught on quickly, but they were never taught how to read and write. Two of my leaders, 2LT Grant Thayer and SFC Jesse Thompson, overcame that obstacle by creating a picture book. They took pictures of an ANA soldier conducting a step-by-step PMCS and included short phrases in Dari for those who could read. The hands-on training was especially effective. A couple of ANA soldiers started standing out among the others. They were always first under the vehicle and quick to push the instructor away so they could do it. We used their motivation and eagerness and had them assist in instructing the next class in a train-the-trainer format. The ANA exceeded our expectations, and, in the end, a maintenance program was established. As a result, the operational readiness rate rose to around 75 percent.

At the heart of our success was the ability to bridge our cultures together. In the mornings, the ANA provided breakfast for the U.S. mechanics and would regularly serve lunch as well. Second lieutenant Thayer and SFC Thompson were there every day, showing them that we cared. The Afghan soldiers are smart individuals and are heading in the right direction. With continued partnership operations, the ANA will one day be able to defend and support their nation.

Jacob Jones
E/1-504 PIR

When our battalion arrived in Ghazni Province in early March, it became obvious after the first few interactions with our partnered *kandak* that their operational readiness rate

A platoon sergeant with the Afghan National Army's 3rd Brigade, 203rd Corps, ensures proper spacing of his troops with paratroopers of the 82nd Airborne Division's 1st Brigade Combat Team during a partnered patrol.

and systems to sustain themselves were broken. While we had anticipated this, the scale was such that the *kandak* remained essentially stationary along Highway 1 and could not project any combat power beyond their immediate spheres of influence. The three-man SFAT working with the *kandak* had little time to invest in mentoring the ANA on logistical issues. We decided to augment the SFAT with organic sustainment personnel from within the forward support company. We placed a small forward logistics element [FLE] consisting of mechanics and cooks at COP [command observation post] Moqor, where two of our infantry companies and the *kandak* headquarters were based. The FLE's task was to increase the capabilities of the *kandak* while simultaneously providing logistical support to all coalition forces on the base. In approximately four months, this partnership effort increased the readiness rate of the *kandak's* rolling stock by more than 300 percent.

We learned several things from this experience.

1. It is important to select the right individuals for the job. The FLE never consisted of more than five mechanics because of competing manning requirements. It was multifunctional, however, with three light-wheeled-vehicle mechanics, a generator mechanic and a clerk. The NCOIC [noncommissioned officer in charge] was a staff sergeant. The maintenance platoon leader split time between COP Moqor and FOB [forward operating base] Warrior, where the majority of our sustainment assets were located. Each individual was chosen based on expertise, ability to operate with minimal supervision and interpersonal communication skills.

2. Assess the Afghan capabilities and then equip them to do the work. Although the *kandak* was authorized mechanics, there were none. Therefore, we made training Afghan mechanics a priority. Each ANA company provided one soldier for the initial training. We envisioned these six not only as being trained as mechanics but also as being liaisons to their companies and able to train others. While the *kandak* had several vehicle types, the course focused on eight 20-level topics on the M1151 and like variants. All classes were conducted via hands-on instruction on non-mission-capable ANA equipment. Simultaneously, the "students" often led training sessions on basic PMCS skills with the soldiers in their companies. This helped build the ANA mechanics' confidence and gave them increased visibility with their leadership.

3. The program had to be phased. Initially, we focused on what we viewed as quick wins. We set a minimal essential equipment list of 12 M1151s for the ANA to execute partnered operations. Jointly, we conducted a fleet-wide techni-

An Afghan soldier directs fellow soldiers during a firefight near Combat Outpost Giro while a paratrooper with 3rd Squadron, 73rd Cavalry Regiment, fires on insurgent positions.

SPC Jason Schmid, a paratrooper with 2nd Battalion, 504th Parachute Infantry Regiment, shares photos with soldiers of the Afghan National Army at their post along Afghanistan's Highway 1.

cal inspection and through controlled substitution were able to reach this initial benchmark. Our generator mechanic was also able to assist the *kandak* with running power to their headquarters. Once we reached an initial capability, we then turned towards increasing the number of vehicles that were operational as well as sustaining the ones that had been repaired. We knew that obtaining parts through the ANA logistical system would remain a challenge, so the priority was placed on educating the ANA. As none of the ANA mechanics were literate, we developed a flowchart diagram that corresponded with the manuals their S4 had so that when they diagnosed a fault, they could take a visual representation of the issue to their *kandak* to get the part ordered. The primary goal throughout this part of the program was to increase the confidence of the ANA in their own systems.

4. Finally, the commander's true priorities determine success. Our first *kandak* commander paid lip service to the importance of maintaining his equipment. The commander who replaced him made improving his maintenance status his number-one priority, to include directly calling his superiors and requesting assistance. That call led to an ANA contact team arriving with parts, which our partnered *kandak* mechanics used to repair many of the small faults that they had identified. This ANA-led effort was a successful culmination of our initial maintenance partnership efforts. With the arrival of a larger SFAT and our RIP [relief in place] unit mirroring our FLE, the stage was set for the ANA to continue to increase their ability to maintain and project combat power throughout the Moqor and Gelan districts.

The reality is that the ANSF in Ghazni Province are quite capable at the company level and below (the level described in this article). A case can be made that they would benefit from not having coalition forces to lean on. At the battalion level and higher, however, there are more issues that could undermine the potential for long-term success. The recently developed security force assistance brigade concept is designed to address this. In other words, less partnering at company level and below and more focus on developing capacity at the higher levels.

Again, members of the CompanyCommand forum (http://CC.army.mil) are invited to access a broader set of lessons learned that we have shared online. Please join the conversation.

If you are a currently commissioned officer, we invite you to join the conversation in the CompanyCommand forum (http://CC.army.mil).

AUSA Membership Benefits*

Bank of America, N.A.:
AUSA Bank Card
Start receiving great rewards and show your support for AUSA. Call 866-438-6262.

Institute of Land Warfare:
ILW offers writing programs; conducts conferences and symposia; publishes essays, Defense Reports, newsletters; and provides research on defense issues. Call 800-336-4570, ext. 4630 for details.

AUSA Mastercare Group Insurance Plans:
- Active Duty & Retiree TRICARE Supplement
- Accidental Death and Dismemberment Plan
- 10-Year Level Term Life Insurance Plan
- Group Term Life Insurance Plan
- Short-Term Recovery Plan
- Long Term Care Plan

Call 800-882-5707 for more information.

Dental and Vision Discount Plans:
Discounts offered to AUSA members on dental services and vision exams. Call 800-290-0523.

This plan is not available in the states of MT and VT.

Emergency Assistance Plus:
If you or a family member gets injured or sick while on travel, this plan will provide medical assistance, bring a medical specialist or loved one to your side and much more. Call 888-633-6450 for more information.

Government Vacation Rewards:
AUSA now offers its members discounts on cruises, resorts and tour providers. Call 866-871-9181.

GEICO Insurance – Auto, Home, Condo/Renters, and Boat:
In states where available, a special member discount may apply. Call 800-861-8380.

Apple Member Purchase Program:
Apple Computers offers AUSA members a substantial savings on its computers. Call 800-MY-APPLE and mention you are a member of AUSA.

Book Program:
Members receive discounts on selected military books.

Army Times/Federal Times:
Subscription discounts on Army Times/Federal Times. Call 800-368-5718.

Dell Member Purchase Program:
AUSA members can now receive discounts on Dell PCs. Call 800-695-8133 for more information.

AUSA Career Center:
AUSA members can now post their resumes and employers can advertise any new openings they have. Visit our Web site and go to the Resources drop-down, then Career Center.

University of Maryland University College (UMUC):
University of Maryland University College (UMUC) is pleased to offer undergraduate and graduate study programs to AUSA members worldwide. For some program participants, a discounted tuition rate will apply.

Armed Forces Services Corporation:
AFSC guides you through the details on military entitlements for your retirement and survivor planning/assistance for your spouse. Call or e-mail: 888-237-2872, info@AFSC-USA.com.

Choice Hotels International®:
AUSA members can receive discounts on hotel rooms at the following hotels.

- Comfort Inn®
- Comfort Suites®
- Quality®
- Sleep Inn®
- Clarion®
- Cambria Suites®
- MainStay Suites®
- Suburban Extended Stay Hotel®
- Econo Lodge®
- Rodeway Inn®

Call 800-258-2847 and use the code 00800700.

Car Rental Program:
Use the reservation codes on the back of your membership card and save at:

• AVIS	800-331-1441	• Hertz	800-654-6511
• Budget	800-455-2848	• National	800-Car-Rent
• Alamo	800-354-2322 *(rental for under age 25 available)*		

Publications:
- *ARMY* Magazine every month, including the October *ARMY Green Book*.
- *AUSA NEWS* every month.

* **Member discounts and services are subject to change.**

For more detailed information, visit Members Only Benefits and Services at www.ausa.org
or call Member Support at 855-246-6269 / 703-841-4300

Soldier Armed

AN/PRC-155 2-Channel Manpack Enters CS13 Production Run

By Scott R. Gourley

Another system under test at the spring 2012 Network Integration Evaluation (NIE) 12.2 was the AN/PRC-155 2-channel Manpack radio, which underwent its Multiservice Operational Test and Evaluation (MOT&E) in conjunction with that event. (See "Soldier Armed," July 2012 and "The Changing Face of Network Integration Evaluations," August 2012.)

As one of three main components of what was formerly called the Joint Tactical Radio System (JTRS) Handheld, Manpack and Small Form Factor (HMS) program, the AN/PRC-155 will soon be added to Capability Set 13 (CS13) equipment fieldings. Designed for both mounted and dismounted operations, the two-channel radios are capable of operating a variety of both legacy and transformational waveforms, including single-channel ground and airborne radio system, high frequency, satellite communications, Soldier Radio Waveform, and others.

"We've been the prime contractor for the HMS program since 2004 and with a great industry team," said Chris Marzilli, President of General Dynamics C4 Systems. "Rockwell Collins is our partner on the Manpack; Thales is our partner on the Rifleman; and BAE Systems is our partner for the Small Form Factor."

According to Marzilli, the recent closure of the JTRS Joint Service Program Office has moved the HMS elements back to the Army, with the AN/PRC-155 being the primary designation now used for the Manpack product.

"The program has been going on for eight years," he said, "and it's really the first to deliver on the ambitious promise of JTRS.

"This is an ACAT [Acquisition Category] 1D program," he added. "In other words, it gets the highest level of scrutiny all the way up to the Office of Secretary of Defense and includes congressional oversight on a periodic basis."

General Dynamics C4 Systems

The AN/PRC-155 Manpack networking radio will soon be added to Capability Set 13 equipment fieldings.

Part of that scrutiny involved careful analysis of system performance during the May-June MOT&E/NIE 12.2 event at White Sands Missile Range, N.M. According to Marzilli, that testing revealed certain anomalies, primarily involving the SINCGARS waveform operating on the AN/PRC-155 inside the mine resistant ambush protected vehicles. That revelation led to a decision to conduct additional testing.

"They had to figure out if those were anomalous, related to the 'noise floor' and integration into the vehicles, or what else might be [wrong]," Marzilli said, "because we have been working with this box through three years of development and four years of testing, and we have never seen that kind of performance. We felt it was not representative of the product at all.

"In a customer test at Fort Bliss [Texas] right after the MOT&E the results were much better—exceeding performance specifications," he continued. "So in lieu of doing a full-on DAB [defense acquisition board] for the product at that time they said, 'Let's take a breather, outfit the vehicles properly and test the radio at the Electronic Proving Ground (EPG) at Fort Huachuca [Ariz.].'"

Meanwhile, in order to ensure that the CS13 package was ready for fielding to U.S. warfighters, the Army purchased an initial quantity of AN/PRC-117G radios to fulfill the network role envisioned for the AN/PRC-155 in the initial two or three CS13 brigades.

The follow-on testing at EPG, called Government Developmental Test 3, was held in September.

"DOT&E [Director, Operational Test and Evaluation], DT&E [Developmental Test and Evaluation] and ATEC [Army Test and Evaluation Command] —all the test officials—were there for a user exercise at the operational level in the objective vehicles," Marzilli said, "and it just went famously. From a performance standpoint, the results of the things that they saw earlier at Fort Bliss were completely erased."

Offering specifics on the demonstrated SINCGARS results, he identified the key performance parameter (KPP) for voice range of the SINCGARS waveform in a mounted configuration as 10 kilometers.

The two-channel radios are designed for both mounted and dismounted operations. The AN/PRC-155 Manpack underwent its Multiservice Operational Test and Evaluation during Network Integration Evaluation 12.2 in the spring.

General Dynamics C4 Systems

"The test community [at EPG] observed and documented upwards of 36 kilometers against that requirement," he said. "That said, at MOT&E we were only at 5 kilometers—half the requirement. So you can understand the need to test in an environment that was reflective of the way you would integrate those vehicles if you had more time and maturity in the way you would configure them.

"Likewise, in the dismounted configuration, against a 5-kilometer requirement, at MOT&E we were seeing just one-half kilometer," he added. "Again, that was not what we have seen through the lab and the development testing, but at EPG they documented 26 kilometers—more than 500 percent of the requirement—in the dismounted mode. So that really says that SINCGARS on the Manpack works extremely well, at operational levels that they did not expect to see."

Other objective KPPs were surpassed in call completion rates, voice quality and availability rates.

"So we attribute that to the combination of the vehicles, the integration into the vehicles and the 'noise floor' on White Sands," Marzilli said. "Particularly during an NIE, it's just not representative of any place you would go on the face of the Earth with respect to how cluttered that spectrum is. Those types of things that are not directly attributable to the radio itself showed up [during the NIE] and then didn't show up when it was done in a more 'operationally reflective' environment and in a vehicle [as it is] configured right out of the factory."

Although the Army had authorized a very small low-rate initial production (LRIP) increment procurement of 100 units earlier this year, the demonstrated performance at EPG in September led to the award of a significantly expanded LRIP order in mid-October.

"This 'LRIP 2,' the second tranche of a low-rate initial production, is for 3,726 [AN/PRC-155] radios, and was signed off by Secretary [Frank] Kendall [Under Secretary of Defense for Acquisition, Technology and Logistics, in October]," Marzilli said. "Those were very encouraging performance results, and we got the right ruling on the ADM [acquisition decision memorandum] consequently."

He added that the order is split between General Dynamics C4 Systems and Rockwell Collins.

"Rockwell Collins and GDC4 Systems ... felt so confident in the relevance and the readiness of the production hardware that we launched, at industry risk, several months ago to protect these incredibly important schedules for Capability Set 13. So we are already building those and we are ready to ship," he said.

The companies expect to ship the first 800 radios by the end of the year.

Army representatives acknowledge that the AN/PRC-155 fieldings will go to the "follow-on brigades" within CS13. As of this writing, it is thought that the first three (possibly two) brigade combat teams (BCTs) in the CS13 package will receive the AN/PRC-117G radios, with the AN/PRC-155s being fielded to the BCTs dubbed next deployers.

"But there is an intent to go back and even refit the first two [or three] brigades," Marzilli said. "Once they get through the cycle they will go back in and refit because they want to 'pure fleet' over time."

Asked about his message to warfighters, he offered, "You've been very patient, but you don't have to wait any longer. We are finally able to deliver to you a two-channel device that can work up and down all levels of command ... and at all security levels, finally including the dismounted soldier in the big Army network at the lower tier with the Rifleman Radio in the Soldier Radio Waveform 'side' of this box, and then getting your classified information up to higher headquarters via the 'second side' of that two-channel Manpack, via SATCOM or Wideband Networking Waveform or [another] spectrum. So it's a powerful technology that they have waited a long time for. It's mature, and it's ready to roll."

"We're extremely pleased with this, but frankly we're not at all surprised by the performance results that were being observed and documented in the real-world operational tests," Marzilli concluded. "It's just about validation of the quality of seven-plus years of system engineering that have gone into this effort. Nothing transformational happens without trials and sweat equity, and today we feel vindicated, as a true industry team, that this was not only an ambitious promise but a deliverable promise. That said, we're not done at all. The team is already back at work advancing the next feature set, including Wideband Networking Waveform and the Mobile User Objective System, which will work on this product as is, preserving that investment that was made in the radio in the first place." ★

Honoring our Army and Its Soldiers

The National Museum of the United States Army at Fort Belvoir, Virginia, will be the nation's one and only museum to present the Army's complete history since 1775. It will serve as the Army's national landmark, honor our Soldiers' service and sacrifice, and cultivate public appreciation for Army history and Army values. In short, the Museum will tell the Army story as it finally deserves to be told.

A great Army deserves a great Museum.

Please join us and others who are working together
to create this long-overdue tribute to our Army and its Soldiers.
For more information, call or visit us online.

NATIONAL MUSEUM
UNITED STATES
ARMY

1-800-506-2672
ww.w.armyhistory.org

AUSA Sustaining Member Profile

ArmaLite, Inc.

Corporate Structure—Founded 1954. President: Mark Westrom. Headquarters: 745 S. Hanford Street, Geneseo, IL 61254. Telephone: 1-800-336-0184. Website: www.armalite.com.

ArmaLite is a privately owned firearms manufacturing firm located in Geneseo, Ill. ArmaLite has one of the broadest product lines in the firearms industry, manufacturing and selling semiautomatic rifles in a variety of calibers including 5.56 mm and 7.62 mm, and long-range super-accurate bolt action rifles in calibers including .308 Winchester, .300 Winchester Magnum, .338 Lapua and .50 Browning Machine-Gun.

ArmaLite's broad customer base includes private gun owners, police agencies such as the Illinois State Police, and federal agencies in support of the AntiTerrorism Assistance Program. International customers include Brazil, where Rio's civil and military police special operations units are now using the AR-10 Super SASS long-range rifle with an adjustable gas system for suppressed or unsuppressed fire.

ArmaLite isn't simply a reseller of products manufactured elsewhere. ArmaLite doesn't rely on the assembly of generic components. Rather, ArmaLite is a complete firearms company with its own engineering, quality assurance, machine shop, assembly, warehouse, marketing, sales and finance divisions. ArmaLite's facility boasts a 50-yard indoor range and high-speed cameras that support both the development of new weapons and the production acceptance testing of current weapons.

The president, Mark Westrom, has led ArmaLite for the past 17 years. He understands small arms from both the commercial and military points of view, both as a designer and as a user.

ArmaLite was established as a division of Fairchild Engine and Airplane Corporation in 1954. There had been very little fundamental development in the small arms industry for more than 50 years, and no fundamental change in military riflery doctrine had been made since the latter half of the 19th century. ArmaLite recognized that a ready market existed for firearms of advanced design featuring lightweight, modern alloys and plastics, and economical production procedures.

In 1954, Eugene Stoner, who served in the U.S. Marine Corps during World War II, became chief engineer for ArmaLite. Stoner had been working on small arms independently since World War II. His patents formed the basis of much of ArmaLite's work, and his AR-10 became the main focus of ArmaLite's attention beginning in 1955.

The AR-10 was stunningly different from any previous design. It was produced with aircraft-grade aluminum receivers and therefore weighed less than seven pounds. The lightweight material was possible because the bolt locked into a steel extension on the barrel, not into the receiver itself. The stock and other furniture were plastic, while those of the T-44 and T-48 were wood. The configuration of the rifle itself, with its integral carrying handle and charging handle distinctively mounted within it, sparked intense curiosity. Though Stoner's AR-10 was not a commercial success in the 1950s, his design did lead to the increasing popularity of the AR platform with the AR-15.

ArmaLite went through several stages of ownership over the next 35 years. In January 1994, Mark Westrom purchased an Illinois firearms company called Eagle Arms. Westrom was a former Army ordnance officer and a civilian employee of the Weapons Systems Management Directorate of the Army's Armament, Munitions and Chemical Command at nearby Rock Island (Ill.) Arsenal. His background in military service rifle competitions produced a focus on high-grade target rifles even before the AR-15/M-16 rifles came to dominate American service rifle competitions in the mid-1990s.

In November 1994, Westrom decided to initiate the design of a .308-caliber AR-10-type rifle, to be called the M-10. In early 1995, he purchased a variety of ArmaLite assets, and production of ArmaLite rifles resumed in Illinois. Westrom's corporation was reorganized as ArmaLite, with Eagle Arms converted to a division of ArmaLite. First shipments of new ArmaLite rifles began in 1995. With the reorganization as ArmaLite, the M-10 rifle was renamed the AR-10.

In 1997, ArmaLite began developing a new rifle, the AR-50 .50-caliber rifle. Chambered for the Browning M2 Machine-Gun cartridge, this innovative single-shot rifle is still in production as the AR-50A1. The success of the AR-50 prompted ArmaLite to consider the viability of a smaller version. The result was the AR-30, now offered in 7.62 mm, .300 Winchester Magnum and .338 Lapua.

ArmaLite has also introduced a blank firing system for the Mk 19 Mod 4 Grenade Machine-Gun. This project has been designated the AR-22.

ArmaLite introduced the SPR Mod 1 at the 2010 SHOT Show. The 5.56x45 SPR Mod 1 features a forged, one-piece upper receiver/rail system with exclusive detachable side and bottom rails. This enables shooters to change their rails to fit their changing needs for sights, lights, lasers, grips or swivels. The SPR Mod 1's one-piece construction offers a continuous optics platform with no gap to bridge between receiver and upper rail when installing scope or sights. This one-piece construction also gives the sighting platform extra rigidity, which means sights will stay zeroed in the most trying conditions.

ArmaLite continues to design new firearms. For the past 58 years, ArmaLite's durability has been based on one core theme: the innovation present in its firearms. That theme serves as both the basis of ArmaLite's corporate strategy and as a challenging image to maintain.

Reviews

Ulysses S. Grant: Hero and Savior?

The Man Who Saved the Union: Ulysses Grant in War and Peace. *H. W. Brands. Doubleday. 727 pages; black-and-white photographs; maps; notes; bibliography; index; $35. Publisher's website: doubleday.knopfdoubleday.com.*

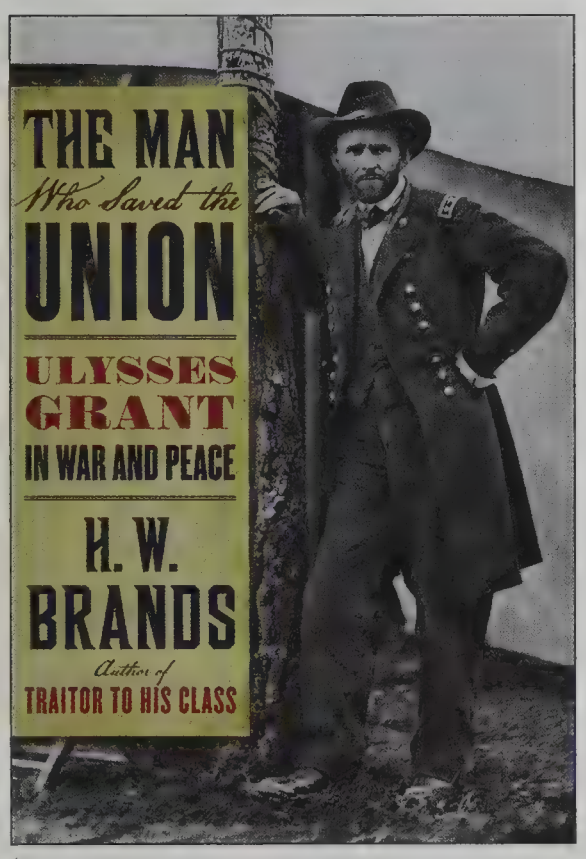
By COL Cole C. Kingseed
U.S. Army retired

Few presidents have been more maligned than Ulysses S. Grant. The "Hero of Appomattox" emerged from the presidency in 1877 as a highly popular figure, but his administration was characterized by total mediocrity, widespread corruption and political naiveté, or so the story goes. In the first full-length biography of Grant in nearly a decade, H. W. Brands presents an alternative interpretation that casts Ulysses S. Grant as the man who saved the United States twice and who ensured that "democracy survived for all its flaws and frustrations."

In recent years Brands has emerged as one of America's premier biographers. The Dickson Allen Anderson Centennial Professor of History and Government at the University of Texas at Austin, Brands was a finalist for the Pulitzer Prize in biography for *The First American: The Life and Times of Benjamin Franklin* and for *Traitor to His Class: The Privileged Life and Radical Presidency of Franklin Delano Roosevelt*. He also has written biographies of Presidents Theodore Roosevelt (*T.R.: The Last Romantic*) and Andrew Jackson (*Andrew Jackson: His Life and Times*).

Brands' analysis of Grant's military story plows familiar ground. Much of his research is based on Grant's personal memoirs and his official orders, letters and memoranda. Another indispensable source is *War of the Rebellion: Official Records of the Union and Confederate Armies*. What Brands contributes to our understanding of Grant is a better comprehension of Grant's formative years and a more detailed explanation of Grant's education as a general from his first campaign in 1861 through the capture of Vicksburg in July 1863. Of particular interest is Brands' portrayal of the emerging friendship between Grant and William T. Sherman, which later bore fruit on a dozen battlefields.

Brands' obvious admiration for Grant is evident on every page. He opines



that it was Grant, not his adversaries, who had the more difficult task during the Civil War. In the Overland Campaign waged in the Virginia countryside during the spring of 1864, for example, "Grant had to win while Lee had merely to avoid losing." Lee's task was far more complicated than Brands attests, and his spirited defense against overwhelming numerical superiority convinced Grant that Lee was of a different caliber than the mediocre generals Grant had faced in the West.

In contrast to most presidential historians, Brands also assigns high marks to Grant for his two terms as the nation's 18th chief executive. Few presidents entered the White House less prepared for high office than did Grant in 1869. Brands views Grant as a reluctant politician thrown into the political arena and "striving to uphold the vision of the Great Emancipator." Despite scandals that were not his doing, Grant emerges from these pages as a capable president whose chief accomplishment was "preserving the gains of democracy and equality against the resistance of all those unconvinced Southerners" whose chief aim was to return the South to the antebellum era.

Grant ensured that federal laws would be upheld amid the growing influence of the Ku Klux Klan throughout the South. Brands asserts that Grant used every tool in his arsenal to ensure that federal laws were strictly enforced and that suffrage for all former slaves was exercised freely in federal and state elections. During his two terms, Grant put "fear of federal power into the Klan and shattered its sense of impunity."

Brands also sees little duplicity in Grant's policy toward the Native American tribes that populated the West. Grant's Indian policy required a delicate balancing act. To placate the Indians, the President sought to convince the tribes that the government had their welfare at heart despite the encroachment of white settlers into territories reserved for the tribes by treaties. According to Brands, Grant held the line as long as he could. The Indians, namely the Sioux led by Sitting Bull and Crazy Horse, "defied the reservation regime, gathering warriors and commencing an armed resistance." In so doing, they forced Grant's hand.

Brands' characterization of the Sioux War of 1876 is curious indeed. He refers to the Sioux as "militants" and conveniently ignores Grant's policy in late 1875 that directed all Indians to return to the reservations by late January 1876 or be viewed as "hostiles." It was the Grant administration and its executive agents that forced war on the Sioux and Cheyenne because Sitting Bull had already demonstrated that he would

never live on a reservation. Moreover, the U.S. Army had already drawn up a campaign plan to force the hostiles to report to reservations even before the deadline passed.

Despite some notable successes, why then did Grant's presidency evoke mixed reactions? Brands posits that influential revisionists on both sides of the Mason-Dixon Line had consciously sought reconciliation, which had also been Grant's goal. But where "Grant's approach to reconciliation was premised on the egalitarian ideals of the Fourteenth and Fifteenth Amendments, these new reconciliationists—white Southern Democrats and Northern capitalist-minded Republicans—preferred the path of amnesia. The Southern Democrats ... recast the Civil War as a difference over states' rights. ... [While] Northern capitalist Republicans lost touch with the anti-slavery roots of their party, they pushed aside Lincoln in favor of J. P. Morgan and company." Not surprisingly, both camps sought to portray Grant to fit their own interpretations of recent history.

Brands concludes his study of Grant on a highly positive note, stating that one thing on which all Americans could agree was Grant's central role in saving the Union. While the majority of Americans would agree with Brands on Grant's central role in winning the Civil War, they are far less unanimous in supporting Brands' thesis that Grant had skillfully guided the South back into the Union and that the Union was more secure than at any previous time in the history of the nation.

In the final analysis, Brands presents an intriguing portrait of Grant the general, but he is far less convincing in his assessment that Grant was a far more successful chief executive than his contemporaries believed. The final verdict, of course, remains with the reader, but this reviewer still awaits a more definitive analysis of Grant's presidential years.

COL Cole C. Kingseed, USA Ret., Ph.D., a former professor of history at the U.S. Military Academy, is a writer and consultant.

A Courageous Fight

Operation Anaconda: America's First Major Battle in Afghanistan. *Lester W. Grau and Dodge Billingsley. University Press of Kansas. 464 pages; maps; black-and-white illustrations; index; bibliography; $39.95. Publisher's website: www.kansaspress.ku.edu.*

By COL Gregory Fontenot
U.S. Army retired

The U.S. armed forces make a shibboleth of joint operations. Senior officers abound who claim that operations are seamless and that never again will anyone wearing "U.S." on their battledress conceive of anything other than joint warfare. Frankly, flag officer protestations aside, these claims are more likely to be realized in the breach than in the execution. After more than 10 years in which the services found ways to conduct operations effectively, they are no more joint now in fact than they were during Operation Anaconda at the outset of operations in Afghanistan. The proof can be seen in the infighting now apparent as the budget knives are drawn. Joint "good feelings" are in sharp decline now that resources are at stake.

Lester W. Grau, a decorated combat infantryman and proven historian, together with Dodge Billingsley, a journalist with combat experience, ably chronicle all that did and did not go well in Operation Anaconda in March 2002. The story they tell in *Operation Anaconda: America's First Major Battle in Afghanistan* is compelling, based on thorough research, personal experience, and an affinity for combat soldiers and airmen. Grau is steeped in the history of the Soviet armed forces generally and Soviet operations in Afghanistan in particular. His interest extends to the experience of the British in Afghanistan as well. In this book, one of several he has written on combat operations in Afghanistan, he broadens that effort to include the U.S. armed forces. Billingsley, although trained as a historian, approaches this story with considerable experience in Chechnya.

The generally understood outline of events in Afghanistan features a brilliant success by special operations forces in support of the Northern Alliance followed by the failure to capture or kill Osama bin Laden in Tora Bora. What is less well known and little understood is just what did happen in the early spring of 2002. To a large extent, Grau and Billingsley bridge that gap.

Fundamentally, Anaconda revealed that the U.S. armed forces had not yet learned how to effect transitions in operations. This had not always been the case. During World War II the U.S. enjoyed the blessing of senior leadership in and out of uniform who could think in time and anticipate transitions. Conducting global operations requires a clear-eyed view of what is feasible and the ability to develop a hierarchy of objectives so that tactical objectives, when achieved, are leveraged for strategic success. That kind of leadership was not on hand in the United States in 2001 and 2002 at the national or combatant command levels.

On the other hand, as Grau and Billingsley argue, U.S. armed forces demonstrated considerable resilience and the capacity to improvise in the absence of well-conceived plans. When the United States went to war in Afghanistan in the fall of 2001, it did so with commendable alacrity and success. What to do after getting into Afghanistan seems not to have occupied much time either in the Office of the Secretary of Defense or in Tampa, Fla., causing ad hoc efforts to become the order of the day. This resulted in piecemeal deployments of units that were then used for missions for which they were not intended. The 10th Mountain Division illustrates this point nicely. Originally deployed to Uzbekistan as "ground tactical headquarters," 10th Mountain had no operational mission in Afghanistan. Thus they deployed without several important assets, including much of the

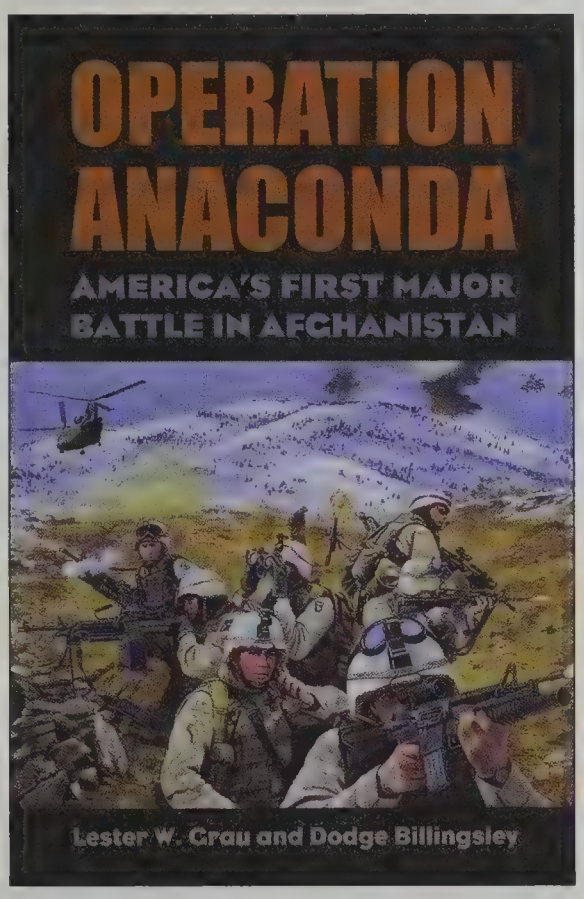
headquarters and all of their Air Force tactical air control parties. The headquarters shortages were acute in the plans cell and intelligence sections. The good news is they were under the troop ceiling that U.S. Central Command (CENTCOM) mandated, but 10th Mountain was only one of several organizations thrown together in this manner.

A recurring theme throughout this story is that in the absence of coherent and cohesive formations, unity of effort is difficult to achieve. In this case, the authors convincingly argue that CENTCOM positively organized the theater in such a way as to ensure that unity of command would be impossible to achieve and unity of effort problematic. The special operations organizations were as muddled—or more so—than 10th Mountain. Here the implications of joint operations as they were executed in 2001 and 2002 meant that every service had to be included whether or not that was the best use of forces. Grau and Billingsley show how, as much as anything else, this led to the costly fight on Roberts Ridge named after the unfortunate U.S. Navy Seal, Neil C. Roberts, who literally fell out of a Chinook.

A second important theme emerges in the domain of the warfighting function—fires. None of the ground tactical formations deployed with any organic or direct artillery support for the very good reason that actual entry into Afghanistan was difficult and even harder to sustain if deployed. As a result, the ground forces absolutely depended on airpower to support tactical operations by fire. Grau and Billingsley, however, contend the U.S. Air Force was not disposed to support tactical operations but rather better prepared to conduct a classic air campaign first destroying integrated air defenses and then attacking strategic targets, finally collapsing resistance as a consequence. In short, it was not very different from the rationale that led 8th Air Force to the ball bearing factories in Schweinfurt, Germany, during World War II.

Very quickly the combined air operations center ran out of strategic targets. Supporting Army ground formations and a menagerie of special operations formations proved difficult. In the end, devoted airmen on the ground and in the air figured it out and ensured that the fires delivered from the air proved effective, if a lot less precise than previously reported. Those airmen also had to confront the results of an incoherent theater command and control system, often while under fire.

The U.S. Army brought to the fray assumptions about what worked best



in ground combat based on faith rather than analysis. Light infantry had, in the U.S. Army, become the be-all and end-all after Operation Desert Storm. Less expensive in basic costs, sustainment and, most important, in the number of tons to be moved, light infantry seemed to be the wave of the future, but American infantrymen in Afghanistan lacked tactical mobility. Grau and Billingsley assert that the Taliban and their al Qaeda allies in the Shah-i-Kot Valley enjoyed a mobility advantage over both the Americans and their Canadian colleagues. The authors are critical of the size of load that the U.S. infantry carried compared to the far more prudent loads carried by the 3rd Battalion, Princess Patricia's Canadian Light Infantry; they also decry the lack of conditioning and training for mountain warfare in the U.S. Army. It is hard to see just how either the 101st or 10th Mountain units that fought in March 2002 could have been afforded the time to train for and get in condition for fighting at high altitudes, although the relatively low rate of "mountain sickness" casualties in these units is a tribute to their overall fitness.

Perhaps the most important theme that the authors explore is how badly nearly everyone in theater misunderstood what was afoot in the Shah-i-Kot Valley. It is clear now, and the evidence was fairly good then, that al Qaeda fought from prepared conventional defenses learned from their earlier experience fighting the Soviets, largely equipped with gear captured either from the Soviets or the Soviet-trained Afghan National Army. The reason they chose to fight in the Shah-i-Kot Valley is that al Qaeda, unlike the Taliban, could not melt away into the general population. They needed to fight a rear guard action at Shah-i-Kot to permit the withdrawal of the bulk of their number into Pakistan.

Operation Anaconda is a well-told story of courage under extraordinary conditions and runs the gamut from Roberts' fighting to the end to Australian Special Air Service providing the platform for effective tactical air control in support of U.S. units in the desperate fights. The Canadians—already famous for their courageous fighting alongside Americans in the Korean War—shone in this one as well. American airpower proved decisive once again, but perhaps not as well coordinated as might have been. Special operations forces of all stripes proved their worth in spades. Decisive in support of the indigenous forces of the Northern Alliance, they proved critical in operations with conventional forces.

***COL Gregory Fontenot**, USA Ret., commanded a tank battalion in Operation Desert Storm and an armor brigade in Bosnia. A former director of the School of Advanced Military Studies, he is coauthor of* On Point: The U.S. Army in Operation Iraqi Freedom *and is director of the University of Foreign Military and Cultural Studies.*

America's Military History

For the Common Defense: A Military History of the United States from 1607 to 2012. *Allan R. Millett, Peter Maslowski and William B. Feis. The Free Press. 736 pages; photographs; maps; notes; index; $28. Publisher's website: imprints.simonandschuster.biz/free-press.*

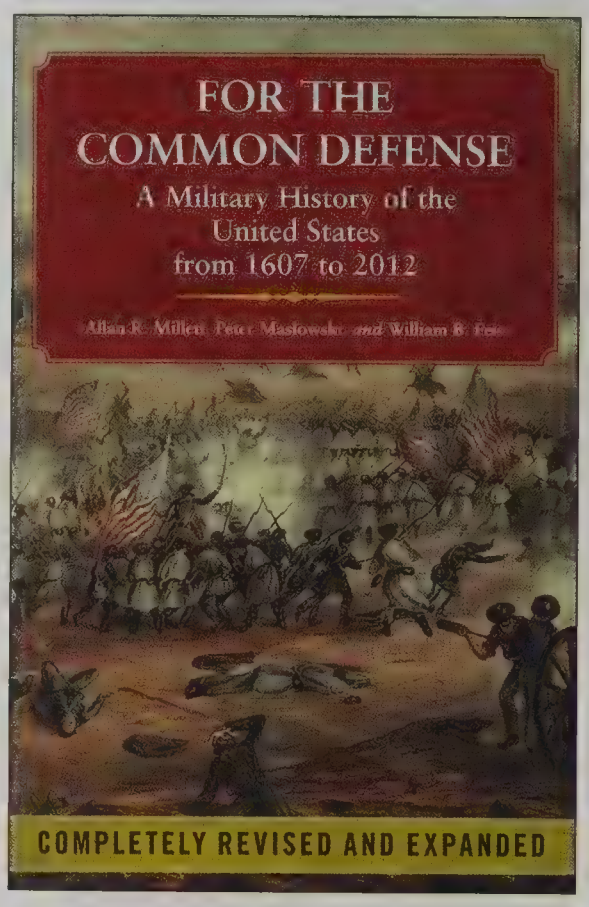
By COL Cole C. Kingseed
U.S. Army retired

Originally published in 1984, *For the Common Defense: Military History of the United States from 1607 to 2012* remains the preeminent survey of American military history. Revised in 1994 and now in 2012, this current volume includes substantial modifications to address the significant national defense issues of the past two decades, with particular emphasis on the complex interventions in Somalia, Haiti, Bosnia, Kosovo, Afghanistan and Iraq. In *For the Common Defense,* Allan Millett and Peter Maslowski have produced a *tour de force* that should be mandatory reading for every military officer and senior defense official.

Millett and Maslowski need little introduction to military historians. Millett serves currently as the Stephen Ambrose Professor of History and the director of the Eisenhower Center for American Studies at the University of New Orleans, and he is the recipient of the Pritzker Military Library Literature Award for Lifetime Achievement in Military Writing. Maslowski is Professor Emeritus of History at the University of Nebraska, Lincoln. William B. Feis, professor of history at Buena Vista University in Storm Lake, Iowa, compiled the bibliographies and read all new material that Millett and Maslowski wrote for the current edition.

Why revise *For the Common Defense* if the book has stood the test of time so well? The authors feel strongly that "ongoing important national defense issues of the last eighteen years and the superb scholarship in military history since 1994 warrant this third edition." Not surprisingly, the reader will not find "dramatic new interpretations or radical departures in intellectual approach," as Millett and Maslowski have strived to provide "the right balance of fact and interpretation to make any discussion of American military history meaningful, whether the debate involves contemporary defense policy or some aspect of American history, such as race relations, in which military history provides relevant testimony."

As in previous editions, six broad themes place U.S. military history within the context of American history. First, rational military considerations



alone have rarely shaped military policies and programs. Millett and Maslowski view the political system and societal values as having imposed constraints on defense affairs. Second, American defense policy has traditionally been constructed upon a mixed force of professionals and citizen-soldiers. Third, the authors opine that policymakers have done remarkably well in preserving the nation's security.

The authors also posit that the nation's firm commitment to civilian control of military policy requires careful attention to civil-military relations. Consequently, the nation's executive and legislative branches are supposed to work in concert for "the common defense." Fifth, the armed forces have become progressively more nationalized and professionalized, with particular emphasis on professional education. Finally, the last 150 years have witnessed the impact of industrialization on shaping the way the nation has waged war.

What makes this edition of *For the Common Defense* so intriguing are the revised chapters on Korea, Vietnam and the Cold War and Millett's new chapters that address the global war on terrorism. Millet revised his analysis of defense policy during the Truman administration to reflect 15 years of research in his quest to undertake a comprehensive history of the Korean War. *The War for Korea, 1945–1950: A House Burning* and *The War for Korea, 1950–1951: They Came from the North* compose the first two volumes of Millett's monumental trilogy of the war. For his part, Maslowski greatly expands his analysis of the war in Southeast Asia in two chapters, vice a single chapter in the original edition.

Millett has also written two new chapters, "World Disorder New and Old, 1993–2001" and "Wars in Afghanistan and Iraq, 2001–2011," to address the significant challenges posed by the illusion of a "new world order" envisioned by previous American presidents. According to Millett, military interventions during the Ronald Reagan and George H. W. Bush years placed American troops in harm's way throughout the world, but these interventions occurred at a limited cost in military lives. The same can be said of President Clinton, but comparing Clinton's strategic experience to that of John F. Kennedy, Millett posits that Clinton's "first-year performance as commander in chief impressed no one except his liberal, antimilitary White House staffers." Indeed, Millett entitles the sub-chapter covering the Clinton administration, "The Clinton Administration: Avoiding War and Inviting Future Conflict, 1993–2001." Not surprisingly, in Millett's view, Clinton's administration did "little to impress Arab and Iranian terrorists with its retaliatory will."

Equally unprepared for strategic defense decisions was President George W. Bush in 2001, but 9/11 provided Bush and his security team a defense focus that evolved into waging simultaneous wars in Iraq and Afghanistan. Millett is especially critical of Bush's initial defense establishment headed by Vice President Dick Cheney and Secretary of Defense Donald Rumsfeld and their cohort of "belligerent neoconservatives." Cheney especially convinced Bush that there could be no global war on terrorism without a preventive war with Iraq. After the terrorist attack on the World Trade Center, Bush needed no more convincing and introduced the American public to the "wisdom" of waging preventive war.

Has the war in Iraq been worth the cost? Millett states that the "consequences of [Operation] Iraqi Freedom cannot be assessed in 2012 with certainty," but he remains highly skeptical of its relevance. "The tragedy of Iraq is not the 2003 invasion war but the eight years of violence that followed the American invasion." Taken collectively, Bush's preventive war "may have convinced Middle Eastern leaders that the United States is a better ally than an enemy in military affairs ... [but if] the Iraq war is a tragedy from the perspective of American national security policy, it is because it had so little to do with the global war on terrorism."

Millett assigns higher marks to President Obama, who enlarged the American commitment to Afghanistan but who proceeded with greater caution than did his immediate predecessor. The most notable changes in strategy during the Obama years have been increased pressure on Pakistan, the stress on partnership with the Afghans and the avoidance of civilian casualties. Each area of this increased shift of emphasis is an important principle of counterinsurgency.

So where does this lead the reader? Millett and Maslowski conclude their study with a cautionary note: Only when "the American people insist that their political leaders make security decisions on the basis of expert advice from civilian and military professionals and not make decisions based primarily on their impact on domestic politics ... will the United States have a common defense."

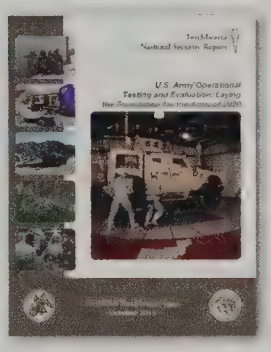
COL Cole C. Kingseed, USA Ret., Ph.D., a former professor of history at the U.S. Military Academy, is a writer and consultant.

Varied Fare

James Meredith and the Ole Miss Riot: A Soldier's Story. *Henry T. Gallagher. University of Mississippi Press. 230 pages; index; glossary; notes; black-and-white photographs; $26. Publisher's website: www.upress.state.ms.us.*

In September 1962, a young African American named James Meredith was scheduled to start classes at the Uni-

PUBLICATIONS
from the Institute of Land Warfare



Land Warfare Papers
- **LWP 92 – Leader Development, Learning Agility and the Army Profession** by Colonel Brian J. Reed (October 2012)[1]
- **LWP 91 – Irregular Warfare: Counterterrorism Forces in Support of Counterinsurgency Operations** by Colonel William B. Ostlund (September 2012)[1,4]
- **LWP 90W – General Matthew B. Ridgway: A Commander's Maturation of Operational Art** by Lieutenant Colonel Joseph R. Kurz (September 2012)[2]
- **LWP 89 – Distilling the Demographic Dividend: Retaining U.S. Army Officer Talent for the 40-year Career?** by Lieutenant Colonel Kevin D. Stringer (June 2012)[1]
- **LWP 88W – The Spider Webs and the Lion: How Energy and Environmental Issues Entangle China** by Colonel Mark Lee (May 2012)[2]
- **LWP 87 – Historical Lessons Applied to the Current Technical Revolution in Military Affairs** by Major Benjamin Huebschman (March 2012)[1]
- **LWP 86 – Applying Natural System Metaphors to the Force Modernization Process** by Colonel K. Todd Chamberlain (February 2012)[1]

National Security Watch
- **NSW 12-4 – Earned Deferred Compensation** by Nicholas R. Krueger (August 2012)[1]
- **NSW 12-3 – Linking Latin America and the Pacific: A Strategy for the Long Term** by Douglas J. Schaffer (July 2012)[1]
- **NSW 12-2 – The Rationale for a Robust U.S. Army Presence in the Pacific Basin** by Nicholas Krueger (March 2012)[1]

NCO Update
- **Fostering Resilience in Army Children**[3] (4th Quarter 2012)[1]
- **Summer Brings Free Passes and Special Deals to Servicemembers**[3] (3rd Quarter 2012)[1]

Special Reports
- **Profile of the U.S. Army 2012: a reference handbook** (June 2012)[1]
- **Your Soldier, Your Army: A Parents' Guide** by Vicki Cody (also available in Spanish)[1]

Torchbearer National Security Reports
- **U.S. Army Testing and Evaluation: Laying the Foundation for the Army of 2020** (September 2012)[1]
- **A New Equipping Strategy: Modernizing the U.S. Army of 2020** (June 2012)[1]
- **Modernizing LandWarNet: Empowering America's Army** (May 2012)[1]
- **U.S. Army Space Capabilities: Enabling the Force of Decisive Action** (May 2012)[1]

Torchbearer Issue Papers
- **Yellow Ribbon Reintegration Program: Building Communities of Readiness** (October 2012)[1]
- **Capability Set Production and Fielding: Enhancing the U.S. Army's Combat Effectiveness** (October 2012)[1]
- **First Army: Training for Today's Requirements and Tomorrow's Contingencies** (April 2012)[1]

Defense Reports
- **DR 11-4 – Unleashing Unlimited Potential: The Army Warrior Care and Transition Program in 2011** (October 2011)[1]

Landpower Essays
- **LPE 12-1 – Just Don't Take Away My Smartphone** by Jeremy Rasmussen (October 2011)[1]

All publications are available free of charge at:
www.ausa.org/publications/ilw

To order these and other ILW publications, visit the Institute of Land Warfare at the AUSA website (www.ausa.org); send an e-mail to **ILWPublications@ausa.org**; call (800) 336-4570, ext. 4630; or write to AUSA's Institute of Land Warfare, ATTN: Publication Requests, 2425 Wilson Boulevard, Arlington, VA 22201-3326.

[1] Available on AUSA website at www.ausa.org/ilw.
[2] Available ONLY on AUSA website at www.ausa.org/ilw.
[3] Lead story.
[4] Winner of the 2012 AUSA/Army Capabilities Integration Center (ARCIC) writing contest.

PFC Matthew Zajac, US Army, 2nd Infantry Division, Fort Carson, Colorado and his father, Mike, photographed at a Fisher House in San Antonio, Texas.

Fisher House Foundation's Hero Miles program provides military members and their loved ones free round-trip airline tickets, sending them to the bedside of their injured service member recovering at a military or VA medical center. Flights are made possible through frequent flyer mile donations by individual airline passengers.

Since its inception in 2004, the generosity of the public has allowed Hero Miles to distribute more than 25,000 airline tickets, saving our heroes and their families more than $40 million. Help reunite America's heroes with their loved ones by donating your miles today. Your contribution will make you a hero to those in need.

For more information, visit **www.fisherhouse.org** and click on *Hero Miles.*

HERO MILES

The Hero Miles program is grateful to our generous partners, including:
AirTran Airways ☆ Alaska Airlines ☆ American Airlines ☆ Continental Airlines
Delta Air Lines ☆ Frontier/Midwest Airlines ☆ United Airlines ☆ US Airways

Hero Miles is a program of the nonprofit Fisher House Foundation.
More information on the Foundation can be found at www.fisherhouse.org.

©2011 Fisher House Foundation / Brendan Mattingly Photography / Don Schaaf & Friends, Inc.

DEC 06 2012

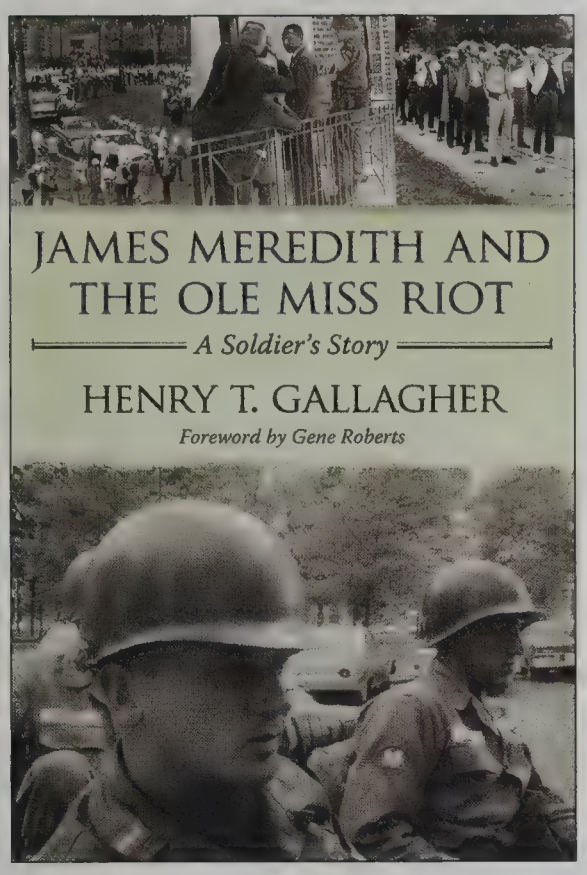
versity of Mississippi. Some in the South couldn't tolerate the thought of that particular break in the color line. Edwin (Ted) Walker, a retired general and outspoken segregationist, declared that everyone should "meet him in Oxford," where he planned to lead protests keeping Meredith from attending the then-all-white university. In response (as Eisenhower had done to enforce the integration of schools in Little Rock, Ark.) President John F. Kennedy ordered federal troops to Oxford, Miss., to quell any violence and make sure Meredith got to class on time.

Then-2LT Henry T. Gallagher was in the middle of the mayhem and recounts his experience in his autobiography: *James Meredith and the Ole Miss Riot: A Soldier's Story.* Here is a footnote to history that should not be forgotten.

Every second lieutenant and newly minted noncommissioned officer (NCO) should read *James Meredith and the Ole Miss Riot*—a modern version of "A Message to Garcia." This is the norm for what all young leaders should anticipate: unexpected responsibility that could come at any moment that will have an impact on their soldiers, their unit and their nation.

Halfway through a two-year tour on active duty with a military police company at then-Fort Dix, N.J., the last thing 2LT Gallagher expected was action. That was when the order came to move out.

At first, he and his men assumed it was just another readiness alert. When they were rushed to the airfield and boarded planes, they started to think differently. Once the platoon realized it wasn't a drill, speculation spread quickly about their ultimate mission and destination. In the hot days of the Cold War there were more than enough likely hot spots—Berlin, Korea, the Middle East and, some even thought, Cuba. Gallagher and his men indeed found themselves heading south, but not *that far* south. Landing at Millington Naval Air Station in Tennessee, they were just told to drive to Oxford as fast as they could.



Every chapter of *James Meredith and the Ole Miss Riot* contains at least one little leadership lesson in responding to confrontations and tasks for which one has not been prepared.

One of the first challenges occurred when the African-American soldiers in Gallagher's platoon were ordered to fall out of the ranks. Only white soldiers would be sent to quell the disturbance.

Before he even got to Oxford the decision to segregate the soldiers who were supposed to enforce desegregation presented a serious test to the young lieutenant's command. Unit cohesion was shattered, and the African Americans in the unit were agitated and inconsolable.

Far more than just a remembrance of race relations in the 1960s, this book will speak to any soldier who has been thrust into any challenging civil-military environment from Kosovo to Katrina to Kabul.

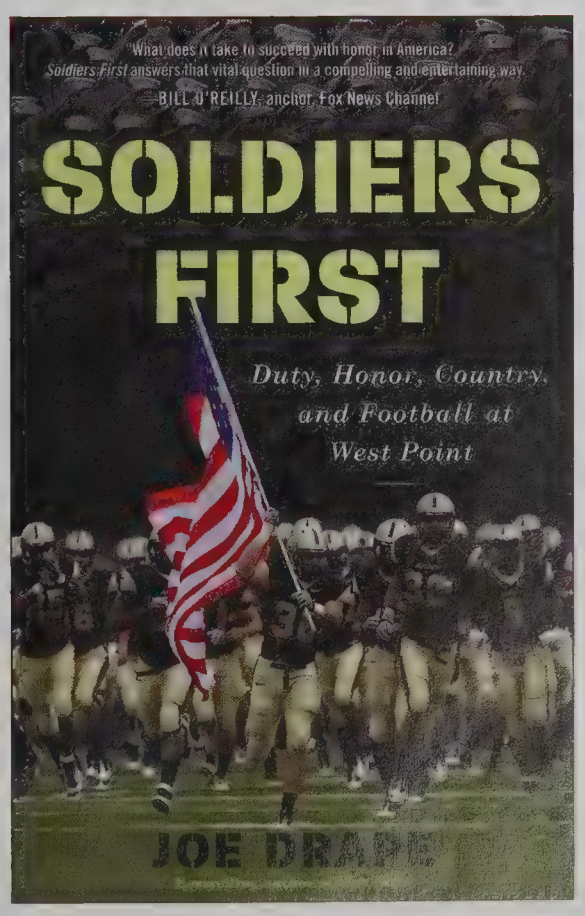
In addition to being a superb case study for the professional development of young officers and NCOs, this history should also prompt further reflection on how the armed forces prepare for military operations in these complex environments.

—By James Jay Carafano

Briefly Noted...

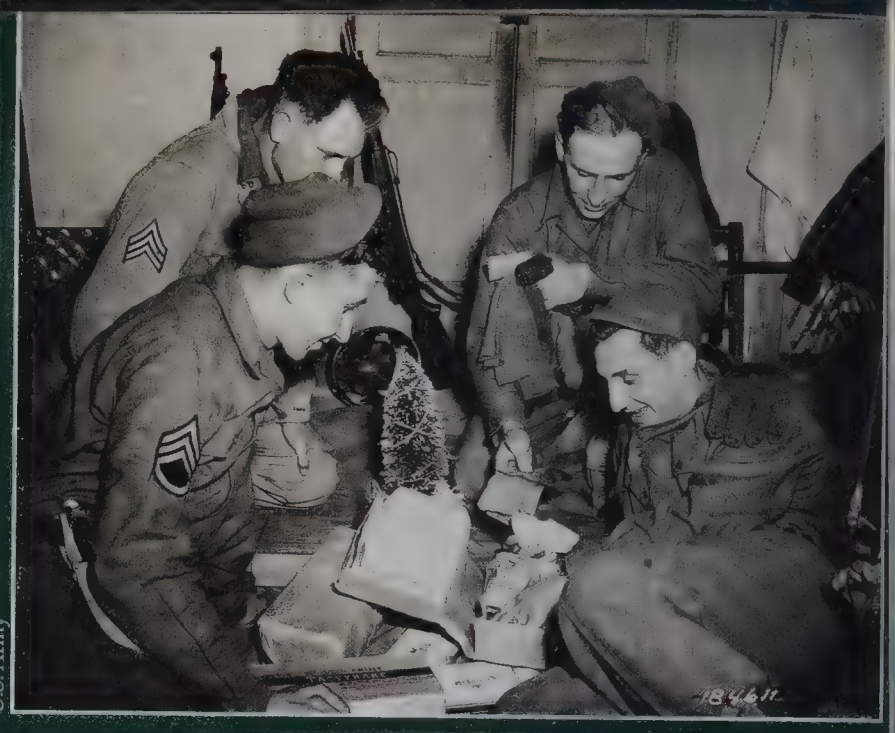
Soldiers First: Duty, Honor, Country, and Football at West Point. *Joe Drape. Times Books. 275 pages; black-and-white photographs; index; $26. Publisher's website: us.macmillan.com.*

Award-winning *New York Times* sportswriter Joe Drape offers an insightful narrative on the hardships of football at West Point in *Soldiers First: Duty, Honor, Country, and Football at West Point.* Divided into four parts—"Plebe Year," "Yearling Year," "Cow Year" and "Firstie Year"—and followed by an epilogue, the book follows five major players through the 2011 football season as they attempt to turn their program around. These West Point cadets must acclimate to the military college environment, excel in challenging academic courses and prepare themselves mentally and physically to deploy to wherever the Army mission takes them upon graduation. Drape addresses the lessons learned and obstacles faced by these impressive student-athletes amid the ultimate West Point football challenge: Beat Navy!



U.S. Army Christmas in the Field

U.S. Army



U.S. Army

U.S. Army

U.S. Army

U.S. Army/CPL Benjamin Cossel

U.S. Army/SSG Alexander Burnett

Clockwise from top left: Christmas mail arrives at Bruvans, France, in 1917. Third Division soldiers open presents in Pietramelara, Italy, in 1943. The Army Band plays Christmas music at the Tan Son Nhut Airbase, Vietnam, in 1970. A cavalry scout accepts holiday decorations by the USO at Camp Nathan Smith, Afghanistan, in 2011. A 1st Cavalry Division sergeant major takes her live tree on a tour of Camp Taji, Iraq, so soldiers can help decorate it. A Korean soldier decorates the tree as Christmas dinner is prepared for men of the 19th Infantry Regiment, 24th U.S. Infantry Division, during the Korean War in 1951.

BATTLEGUARD®

REMOTE WEAPON STATION

BEST PERFORMANCE. MOST VERSATILE. MOST CONFIGURABLE.

With its superior range and resolution, BattleGuard is the most modular and high-performance remote weapon station for current and future tracked and wheeled military vehicles. It is the only system that can accurately identify targets out to the maximum effective range of weapon systems, more than twice that of competitive technologies. BattleGuard integrates 16 lethality systems (and counting) — all readily configurable by the warfighter — to deliver 360 degrees of proven protection.

To learn more about how BattleGuard is driving Remote Weapon Station capability, please visit:
Raytheon.com | Keyword: BG360

Follow us on:

Raytheon

Customer Success Is Our Mission

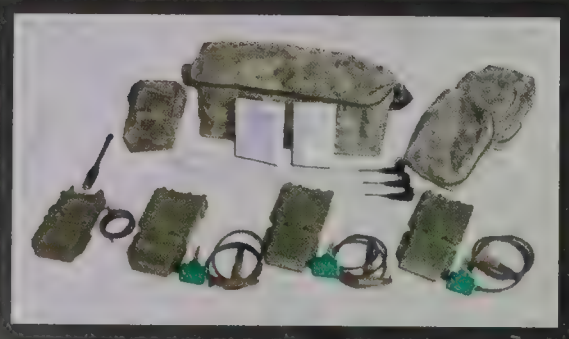
© 2012 Raytheon Company. All rights reserved.
"Customer Success Is Our Mission" is a registered trademark of Raytheon Company.

UNIVERSITY OF ILLINOIS-URBANA
3 0112 100438222

YOUR SEVENT

Use of this U.S. DoD image does not imply or constitute endorsement.

L3



When Your Life Depends on Knowing What's Out There

The Battlefield Anti-Intrusion System (BAIS) is the soldier's seventh sense, providing our warfighters with covert, early warning intrusion detection and threat classification of vehicles and personnel at levels well beyond the range of human capability. In support of a DoD Program of Record and tested by the U.S. Army Test & Evaluation Command, L-3's BAIS (AN/PRS-9A) is providing critical in-theater force protection to troops actively fighting on battlefields today. It's just another example of how our systems are on the leading edge of tactical unattended ground sensor technologies.

For more information visit, www.L-3com.com/bais.

Communication Systems-East

L-3com.com

4/12/2013
T 2888925 6 00
HF GROUP - IN

UNIVERSITY OF ILLINOIS-URBANA
3 0112 112525594